# REGION 6 LONG RANGE TRANSPORTATION PLAN





## **DRAFT**

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#### **Region 6 Services**

Region 6 provides regional transportation services as the Regional Transit Authority for the four-county area. Approximately 40,000 rides per year are provided to primarily elderly and disabled patrons. Region 6 also plans and programs Federal Highway Administration Surface Transportation Program (STP) funds for the Region 6 federal aid system and FHWA transportation alternative program funds. Region 6 also provides a wide range of other services to its members:

- community development;
- comprehensive planning assistance;
- housing needs assessments;
- tax increment financing and tax abatement;
- housing rehabilitation;
- historic preservation and downtown rehabilitation;
- hazard mitigation;
- economic development;
- grant writing and administration;
- Safe Routes to School program assistance to schools and communities;
- land use planning, zoning, city codes, and subdivision ordinances; and
- local government training and development, personnel training, policy development, and process facilitation.

Membership in the Region 6 Resource Partners is open to any county or city within the four-county geographic area.

#### **Executive (Policy) Board of Directors**

All regional transportation decisions are made by the Region 6 Resource Partners Board of Directors. Region 6 revised its policy board structure in 2007 to comply with the requirements of the Economic Development Administration. The mission of this board is to develop and implement economic development, community development, transit, and transportation policy for Region 6.

Articles of Incorporation have been revised to include at-large seats on the board of directors to represent the private sector and the growing minority population. The board includes 8 to 13 elected members and 5 to 8 non-elected members, with a minimum of 13 and a maximum of 21. All non-elected members will be approved by the Region 6 Board of Directors. There will always be a majority of elected officials versus non-elected members.

The Region 6 policy board reflects the region's population and business demographics and is representative of the various objectives of Region 6: economic and community development, transit, housing, and transportation. The Region 6 Board and Transportation Committee are outlined below. The Transportation Committee works under the Executive Board of Region 6, which is responsible for the day-to-day operation of the Commission. The Executive Board of Region 6 reviews the direction of the transportation committee and makes any necessary final actions.

## Region 6 Executive (Policy) Board

#### 1. **GOVERNMENT REPRESENTATIVES** (51-65%)

Elected officials and/or employees of a general purpose unit of state, local or Indian tribal government who have been appointed to represent the government. Articles require seats noted below. 8 required (min).

NAME	GOVERNMENT	POSITION
Kendall Jordan	Tama County	Board of Supervisors
Lance Granzow	Hardin County	Board of Supervisors
Jason Roudabush	Poweshiek County	Board of Supervisors
Jody Anderson, Chair	City of Iowa Falls	City Administrator
Michelle Spohnheimer	City of Marshalltown	City Housing Administrator
Dan Agnew	City of Grinnell	Mayor
Trudi Scott	City of Gladbrook	City Council

#### 2. **NON-GOVERNMENT REPRESENTATIVES** (35-49%)

5 required minimum. 1 minority rep strongly preferred (public or private).

A. **Private Sector Representatives:** Any senior management official or executive holding a key decision-making position, with respect to any forprofit enterprise. (At least one required).

NAME	COMPANY/ENTERPRISE	POSITION
Mark Schoborg, Vice Chair	Self-Employed	Independent Business
-		Owner
Dave Thompson,	Thompson True Value & Marshall	Owner
Secty/Treas	County Board of Supervisors	
Roger Luehring	Clapsaddle-Garber Associates	Finance Manager

B. Stakeholder Organization Representatives: Executive directors of chambers of commerce, or representatives of institutions of post-secondary education, workforce development groups or labor groups. (At least one required).

NAME	ORGANIZATION	POSITION
Mark Buschkamp	Iowa Falls Area Development	Director
	Corporation	

Region 6 has a Transportation Committee that operates in an advisory capacity under the Executive Board.

#### **Transportation Committee**

The purpose of the Transportation Committee is to plan and program the Surface Transportation Program (STP) funds allocated for Region 6 counties. Three voting members from each of the four counties serve on the Committee. Peoplerides, the regional transit system operated by Region 6, also has one vote. One of the two members from each county is the County Engineer. A second member is a city engineer or city administrator from a city with a population of over 5,000 people. A third member from each county represents Transportation Alternatives Program (TAP) interests. The two non-voting (ex officio) members on this committee represent the State of Iowa Department of Transportation and the Marshalltown Municipal Transit, the only municipal transit system serving the Region.

Transportation Technical Committee	Name	Title	County, City or Agency Represented
Voting Member	Taylor Roll	County Engineer	Hardin County
Voting Member	Jody Anderson	City Administrator	City of Iowa Falls (Hardin
			County)
Voting Member	Paul Geilenfeldt	County Engineer	Marshall County
Voting Member	Justin Nickel	Public Works	City of Marshalltown, Marshall
		Director	County
Voting Member	Lyle Brehm	County Engineer	Tama & Poweshiek Counties
Voting Member	Russ Behrens	City Administrator	City of Grinnell, Poweshiek
			County
Voting Member	Doug Ray;	Mayor of Tama;	Tama/Toledo urbanized area (1
	Brian Sokol	Mayor of Toledo	vote), Tama County
Voting Member	Marty Wymore	Director	Region 6 Transit/Peoplerides
Non-Voting (ex	Andy Loonan	IA DOT	State of Iowa
officio)			
Non-Voting (ex	Kevin Pigors	Municipal Transit	Marshalltown Municipal Transit
officio)		Director	
Non-Voting (ex	Rita Schoenman	Grant Writer	Meskwaki Tribe
officio)			

#### **Region 6 Staff**

Region 6 staff also plays a key role in developing effective regional strategies. Region 6 benefits from a creative and talented staff with extensive experience in transportation planning, regional transit operations, project management, and grant administration. Region 6 staff stays abreast of project challenges and new potential projects that are a good fit for the regional program.

#### Other Representation

The Meskwaki Settlement is included on our Region 6 Transportation Planning mailing lists. They are informed about meeting agendas and application deadlines. Periodically Region 6 staff consults with Meskwaki staff to discuss upcoming projects.

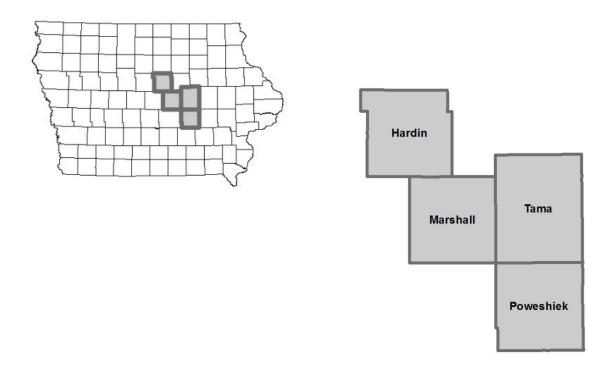
#### **Region 6 Resource Partners Area**

Region 6 includes the central Iowa counties of Hardin, Marshall, Poweshiek, and Tama. The region also includes the Meskwaki Settlement, in Tama County. The four counties also include 45 cities. Overall, these counties, cities, and settlement form Iowa's Region 6, which is served by the Region 6 Resource Partners.

The Region 6 Resource Partners serves as both a regional planning affiliate (RPA) for the Iowa Department of Transportation and as a Council of Governments (COG) that provides planning services to the counties, cities, and settlement in the region. Services common to the four counties include transportation planning, passenger transit planning, community development grant writing and administration, comprehensive plan development and preparation, and administration of housing rehabilitation programs throughout the region. The commission is also the operator of the regional transit system, Peoplerides, which specializes in providing rides to elderly and disabled individuals but is available for everyone.

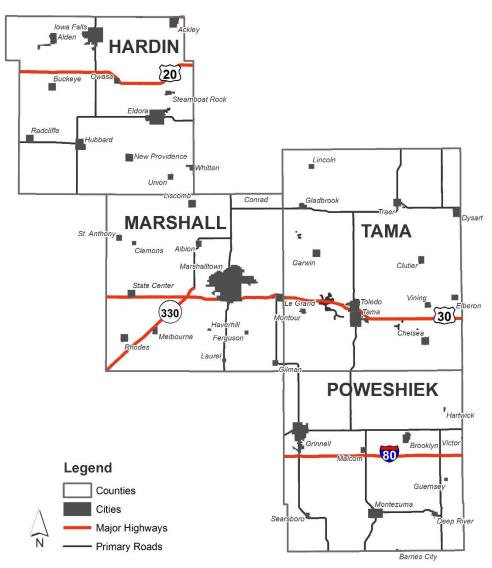
In order to encourage coordination between transportation and economic development planning, as well as to ensure full representation of the region in both the Long Range Transportation Plan (LRTP) and the Comprehensive Economic Development Strategy (CEDS), a region-wide committee was created. Public input was encouraged for all committee meetings. The Region 6 Resource Partners is responsible for monitoring the progress in achieving goals and identifying the overall outcomes of the both Plans. This assessment process is completed with region-wide committee guidance.

Region 6 in the Context of Iowa



Cities in Region 6 Counties

<b>Hardin County</b>	<b>Marshall County</b>	Poweshiek	Tama County
		County	
Ackley	Albion	-	Chelsea
Alden	Clemons	Brooklyn	Clutier
Buckeye	Ferguson	Deep River	Dysart
Eldora	Gilman	Grinnell	Elberon
Hubbard	Haverhill	Hartwick	Garwin
Iowa Falls	Laurel	Malcom	Gladbrook
New Providence	Le Grand	Montezuma	Lincoln
Owasa	Liscomb	Searsboro	Montour
Radcliffe	Marshalltown	Guernsey	Tama
Steamboat Rock	Melbourne	·	Toledo
Union	Rhodes		Traer
Whitten	St. Anthony		Vining
	State Center		Meskwaki Settlement



#### **Long Range Transportation Plan**

The Long Range Transportation Plan 5 year update preparation included extensive interviews across the four counties with city clerks, council members, city managers and mayors; with county supervisors and county engineers; with Region 6 policy board and transportation committee; with transportation providers and their clients; and with public transit agencies to review long-range transportation needs and current planning efforts and discussions regarding the effectiveness of existing roads, bridges, and services. Discussions, goals, and public input activities of the Regional Development Committee were used as a baseline to begin the long-range transportation planning process.

The steps to preparing this plan included:

- 1. Review current LRTP for the region
- 2. Complete background update research on the region
- 3. Conduct public participation survey (Google Forms)
- 4. Identify goals for the region
- 5. Identify realistic objectives and projects to achieve the goals for the region
- 6. Create an action plan for achieving goals
- 7. Create a plan for monitoring progress and outcomes
- 8. Complete a draft LRTP for DOT, FHWA, and FTA review
- 9. Review draft LRTP and incorporate comments

It is important to determine the existing plan's relevance to current conditions in the region and what progress, if any, was made in accomplishing goals and objectives. This review was done concurrently with an analysis of the current data available for the region and a review of existing plans. Data sources and plans include but are not limited to the following:

- Iowa Workforce Development
- o Iowa Department of Transportation
- Iowa Department of Natural Resources (DNR)
- US Fish and Wildlife Services
- o Iowa Department of Health and Human Services
- Iowa Economic Development Authority
- o Iowa State Historical Society
- o Iowa State University
- o Local municipalities and county resources
- o National Park Service, US Department of the Interior
- State Data Center of Iowa
- U.S. Census Bureau
- o U.S. Department of Transportation National Pipeline Mapping System
- U.S. Federal Railroad Administration
- Woods and Poole Economics
- o Existing plans and stated priorities for the nation, state, counties, and cities in the region
- Various reports and articles

A series of interviews were conducted with county engineers, city staff, transportation providers, and economic development professionals to identify current needs, progress in existing projects, and local plans for the future. These interviews were completed throughout the region in all counties, large cities, and small cities.

#### CHAPTER 2: PLAN GOALS AND OBJECTIVES

#### Vision, Goals, and Objectives

Local and regional transportation systems impact economy, commerce, environment, public health, and quality of life for residence and visitors alike. With this in mind, the vision and goals of the LRTP should reflect the values of the region and address the most prevalent needs indicated by the residents of the planning area. The vision, goals, and objectives illustrated in the LRTP provide a basis for planning principles and guidance for the regional planning process.

The vision statement for the LRTP 2020-2050 states that:

"Our transportation system will provide safe, accessible, sustainable options and support economic development, allowing for the effective movement of all people, goods, and services – aiming to maintain and enhance our quality of life."

The Region 6 LRTP 2020-2050 was shaped by community feedback gathered through community surveys conducted in 2019. Citizens were inquired about a broad range of transportation areas including infrastructure, recreation, public transit, facility maintenance, freight, and safety. Results of the community survey revealed that the item of most importance to residents is to maintain and improve the existing road system and bridges. Funding safe routes to school, including walkability, was the second and improving road safety was the third item of importance. Below is a table reflecting the transportation funding options and their combined rating of "very important" and "important."

Community Survey Results: Importance Rating of Transportation Funding Options

	Importance
Transportation Option	Rating
Maintain and improve existing road system and	
bridges	85%
Fund safe routs to school project - walkability	79%
Imrpove road safety	77%
Maintain and Improve sidewalks	69%
Offer more transit services for elderly and disabled	68%
Expand public transit services	56%
Build multi-use recreational trails	43%
Build on-street bike lanes	37%
Build and maintain railways	31%
Develop carpool/vanpool system	28%
Maintain and improve airports	19%

#### What are Goals and Objectives?

A goal is the desired end to which effort is directed, based on societal values. An objective is derived from a goal and is intended to be more specific and action-oriented. Objectives identify short-term, measurable steps within a designated timeframe and propel us towards achieving the long-term goals identified in the LRTP.

Goals and objectives should be clear and understandable to everyone involved: policymakers, transportation professionals and citizens. They should be developed independently and goals should not be mode-specific. The Region 6 Policy Board was presented with the following goals and objectives on November 30, 2020 and voted to approve. Below are goals and objectives that should guide transportation planning in Region 6. Action items to progress implementation, as well as current and future projects are discussed in Chapter 7.

#### **Goals and Objectives**

# Goal 1: Provide an efficient, multimodal transportation system to promote connectivity and mobility.

Objective 1.1: Affordability

Provide convenient, affordable transportation throughout the region.

Objective 1.2: Mobility

Support accessible transportation modes for individual and commercial needs.

Objective 1.3: Public Health

Support active, healthy, and safe transportation options including recreational trails and multimodal roadways.

#### Goal 2: Maintain and improve existing infrastructure.

Objective 2.1: Cost Effectiveness

Identify and prioritize projects that provide a high benefit to cost.

Objective 2.2: Interconnectivity

Maximize the interconnectivity of roadways, sidewalks, bicycle facilities, trails, transit and other transportation system components to provide safe and convenient pedestrian, bicycle, transit and motor vehicle mobility.

Objective 2.3: Safety

Identify and prioritize projects that enhance safe mobility throughout the region.

#### **Goal 3: Improve Safety and Security**

Objective 3.1: Roadway Safety

Identify and prioritize improvements that reduce the number and severity of traffic crashes.

Objective 3.2: Bicycle and Pedestrian Safety

Implement safety programs and enhancements for bicycle and pedestrian facilities.

Objective 3.3: Hazard Mitigation

Support emergency response and evacuation, post-disaster recovery, and help improve local, state, and national security.

#### Goal 4: Provide an inclusive, accessible, and equitable transportation system

Objective 4.1: Transit access

Support transportation investments that improve public transit services for low income and transit dependent populations to increase access to goods and services that improve quality of life.

Objective 4.2: Transportation equity

Identify the needs of low income and minority populations and develop strategies to ensure that transportation projects do not disproportionally burden low income and minority populations and produce procedures that avoid or mitigate adverse impacts.

Objective 4.3: Public Participation

Provide open, inclusive opportunities for public input and develop outreach strategies that encourage citizens of all socio-economic demographics to participate, with a focus on low-income and minority populations.

#### Goal 5: Enhance sustainability of the region.

Objective 5.1: Enhance Economic Sustainability

Provide transportation services that promote local and regional economic growth and support transit programs that improve access to employment and education.

Objective 5.2: Improve Environmental Sustainability

Support transportation projects and programs that minimize impacts to natural resources, reduce greenhouse gas emissions, and reduce pollutants that adversely impact soil and water quality.

Objective 5.3: Efficiency

Develop evaluation strategy and implement programs that maximize the efficiency of economic resources.

#### Goal 6: Develop, maintain, and promote quality community spaces.

Objective 6.1: Evaluate and Promote Walkability

Evaluate bicycle and pedestrian mobility throughout the region and prioritize projects to enhance person-centered mobility options including, but not limited to, trail access and connectivity.

Objective 6.2: Comprehensive Planning

Integrate transportation and land use planning to enhance livability and economic opportunity throughout the region.

Objective 6.3: People-Oriented

Plan and develop community transportation corridors that enhance quality of life for individuals in the region.

#### **10 Planning Factors**

As part of the Long Range Transportation Plan update, RPA 6 is required to develop the plan through a performance-driven and outcome-based. approach. To guide RPAs through a planning process that is continuous, cooperative, and comprehensive, 10 Metropolitan Planning Factors must be met in the plan. These factors are included under 23 CFR 450.306. The table on the following page shows a matrix that illustrates how the six goal areas of the plan align with the Metropolitan Planning Factors listed below:

- 1. Support the economic vitality of the metropolitan area
- 2. Increase the safety of the transportation system for motorized and non-motorized users
- 3. Increase the security of the transportation system for motorized and non-motorized users
- 4. Increase the accessibility and mobility of people and freight
- 5. Protect and enhance the environment, promote energy conservation, improve the quality of life, and promote consistency between transportation improvements and State and local planned growth and economic development patterns
- 6. Enhance the integration and connectivity of the transportation system across modes, for people and freight
- 7. Promote efficient system management and operation
- 8. Emphasize the preservation of the existing transportation system
- 9. Improve the resiliency and reliability of the transportation system and reduce or mitigate stormwater impacts of surface transportation
- 10. Enhance travel and tourism

# Region 6 Goals and Objectives Alignment with Federal Metropolitan Planning Factors

					Feder	ral Pla	nning	Facto	rs		
Goal	Objectives	1 – Economic Vitality	2 - Safety	3 - Security	4 – Accessibility and Mobility for People	5 – Environment and Energy Conservation, Quality of Life, Economic Development		7 – Efficient Operations and Management	8 – Preserve the Existing Transportation System	9 – System Resiliency and Reliability; Reduce/Mitigate Stormwater Impacts	10 – Enhance Travel and Tourism
Goal 1: Provide an efficient, multimodal transportation system to promote connectivity and mobility.	Affordability: Provide convenient, affordable transportation throughout the region.  Mobility: Support accessible transportation modes for individual and commercial needs.  Public Health: Support active, healthy, and safe transportation options including recreational trails and multimodal roadways.	•			•	•	•				
Goal 2: Maintain and improve existing infrastructure.	Cost Effectiveness: Identify and prioritize projects that provide a high benefit to cost.  Interconnectivity: Maximize the interconnectivity of roadways, sidewalks, bicycle facilities, trails, transit and other transportation system components to provide safe and convenient pedestrian, bicycle, transit and motor vehicle mobility.  Safety: Identify and prioritize projects that enhance safe mobility throughout the region.		•	•	•	•			•		
Goal 3: Improve Safety and Security	Roadway Safety: Identify and prioritize improvements that reduce the number and severity of traffic crashes.  Bicycle and Pedestrian Safety: Implement safety programs and enhancements for bicycle and pedestrian facilities.  Hazard Mitigation: Support emergency response and evacuation, post-disaster recovery, and help improve local, state, and national security.		•							•	

Goal 4: Provide an inclusive, accessible, and equitable	<b>Transit access:</b> Support transportation investments that improve public transit services for low income and transit dependent populations to increase access to goods and services that improve							
transportation system	quality of life. <b>Transportation equity:</b> Identify the needs of low income and			•				
	minority populations and develop strategies to ensure that transportation projects do not disproportionally burden low income and minority populations and produce procedures that avoid or							
	mitigate adverse impacts.							
	<b>Public Participation:</b> Provide open, inclusive opportunities for public							
	input and develop outreach strategies that encourage citizens of all socio-economic demographics to participate, with a focus on low-							
	income and minority populations.							
Goal 5: Enhance	Enhance Economic Sustainability: Provide transportation services							
sustainability of the	that promote local and regional economic growth and support transit							
region.	programs that improve access to employment and education.							
	Improve Environmental Sustainability: Support transportation							
	projects and programs that minimize impacts to natural resources, reduce greenhouse gas emissions, and reduce pollutants that							
	adversely impact soil and water quality.							
	<b>Efficiency:</b> Develop evaluation strategy and implement programs that maximize the efficiency of economic resources.	•				•		
Goal 6: Develop,	<b>Evaluate and Promote Walkability:</b> Evaluate bicycle and pedestrian							
maintain, and promote	mobility throughout the region and prioritize projects to enhance							
quality community	person-centered mobility options including, but not limited to, trail							
spaces.	access and connectivity.	_			_			
	<b>Comprehensive Planning:</b> Integrate transportation and land use planning to enhance livability and economic opportunity throughout							
	the region.							
	<b>People-Oriented:</b> Plan and develop community transportation							
	corridors that enhance quality of life for individuals in the region.							

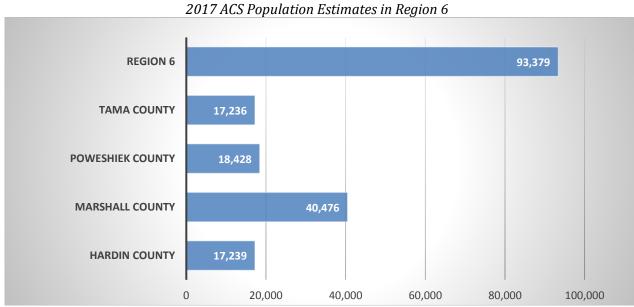
#### CHAPTER 3: REGIONAL BACKGROUND AND TRENDS

Past and current trends will impact future transportation needs in the region. This section includes a summary and analysis of recent conditions and past trends regarding the Region 6 population, economy, and environment. For easy reference, a summary of important consideration are provided at the end of each section.

#### **Population and Quality of Life**

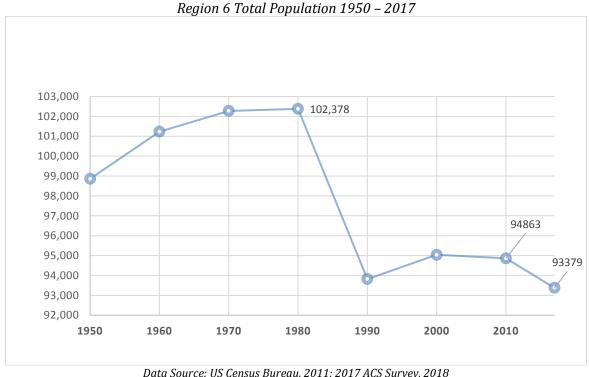
#### **Population**

Region 6 counties – Hardin, Marshall, Poweshiek, and Tama – have a total population of 93,379 people, according to 2017 American Community Survey population estimates. Total population in the Region 6 area in down 3.6% from the 2010 Census data (94,863 people). In terms of population, Marshall County is by far the largest county in the region with a population of 40,476 followed by Poweshiek County. Tama, and Hardin County have nearly the same population at 17,236 and 17,239 respectively. The largest city in the region, Marshalltown, is located in Marshall County. Marshalltown's population was 27,440 in the 2017 ACS estimate, which is nearly two-thirds of Marshall County's population and nearly a third of the entire population of Region 6.

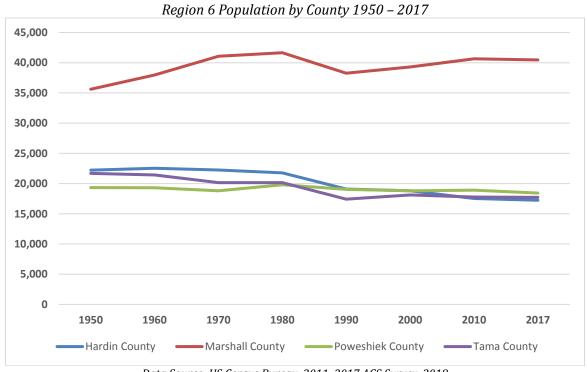


Data Source: American Fact Finder, 2018

The current population count in the region is similar to early 20th century levels. Since the late 19th century, the Region 6 population steadily increased each decade until a steep decrease occurred between 1980 and 1990. Since 1990, the population has stabilized. If 2017 ACS estimates are correct, the Region may expect to see a slight decline in the 2020 Census.



Data Source: US Census Bureau, 2011; 2017 ACS Survey, 2018



Data Source: US Census Bureau, 2011; 2017 ACS Survey, 2018

Fluctuation in Marshall County's population is influenced primarily by changes in Marshalltown's population. The second largest city in Marshall County is State Center with a 2017 population of 1,361. All other cities in the county have a population less than 1,000.

The second largest city in the region is Grinnell, located in Poweshiek County, with a 2017 population of 9,028. Grinnell is the only city in Poweshiek County with a population that has steadily increased over time; however, the city experienced a 2% population decline from 2010-2017. The second and third largest cities in Poweshiek County are Brooklyn and Montezuma, respectively. Both cities have a population right around 1,500.

The largest cities in Hardin County are Iowa Falls, Eldora, and Ackley with a 2017 population of 5,132; 2,677; and 1,729, respectively. In Tama County, the largest cities are Tama, Toledo, Traer, and Dysart in descending order. Tama and Toledo share a corporate boundary and have a combined population that just exceeds 5,000, while Traer and Dysart have a 2017 population of 1,646 and 1,473, respectively. In both counties, all other cities have a population less than 1,000.

The Meskwaki Settlement, in Tama County, is steadily increasing in population. In 1990, 564 persons lived in the Settlement, and the 2000 Census counted 761 persons. In the latest census administered by the Meskwaki Settlement (provided by Iowa State Historical Society in 2011), the Settlement had 1,343 enrolled members with approximately 850 members living in the Settlement.

Looking at the most recent decade with Census data, data shows an overall population decrease in the Region 6 population between 2000 and 2010. The decrease is fairly small at just 0.2%. Marshall and Poweshiek County experienced a modest increase, 3% and 1% respectively, but Hardin and Tama County offset these increases. Hardin County accounts for the majority of population loss in the region with a 7%, or a nearly 1,300 person loss.

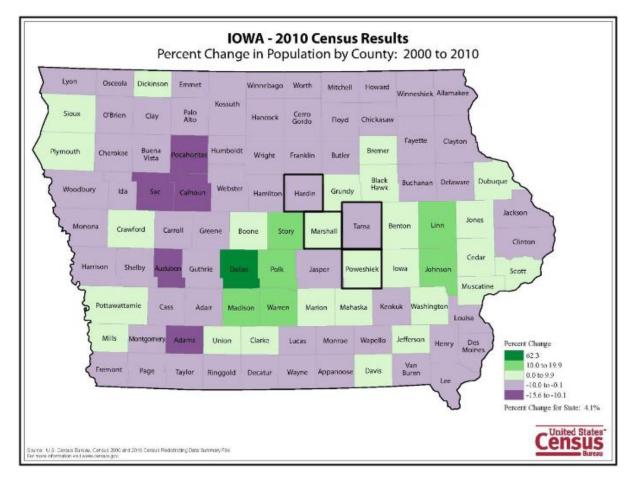
Population Change 2000 - 2010

	2000	2010	Change
<b>Hardin County</b>	18,812	17,534	-6.8%
<b>Marshall County</b>	39,311	40,648	3.4%
<b>Poweshiek County</b>	18,815	18,914	0.5%
Tama County	18,103	17,767	-1.9%
Region 6	95,041	94,863	-0.2%

Data Source: State Data Center of Iowa, September 2012

In comparison, between 2000 and 2010, Iowa's total population increased about 4% with growth primarily occurring in the counties with larger cities like the Des Moines metropolitan area and the Cedar Rapids-Iowa City corridor. As is the case across the United States, population growth is occurring primarily in the incorporated or more urban areas of the region rather than in the unincorporated, rural areas.

Percent Change in Population by County: 2000 to 2020



Data Source: US Census Bureau, 2018

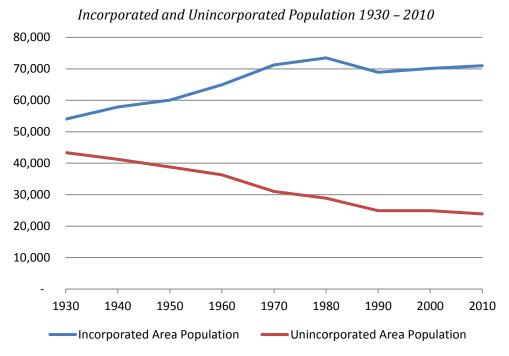
When comparing regional population changes between the 2010 Census and 2017 ACS estimates, all counties have experienced some level of population change in this time frame, resulting in a 1% population loss overall. The largest population loss in real numbers occurred in Poweshiek County with a 486 person loss followed by Hardin County with a 296 person loss. Trends will be assessed once 2020 Census data is available.

Population Change 2010-2017

	2010	2017	Change
<b>Hardin County</b>	17,534	17,239	-1.7%
<b>Marshall County</b>	40,648	40,476	4%
<b>Poweshiek County</b>	18,914	18,428	-2.6%
Tama County	17,767	17,726	2%
Region 6	94,863	93869	-1%

Data Source: American Fact Finder, 2018

#### **Incorporated and Unincorporated Populations**



Data Source: State Data Center of Iowa, September 2012

In the past century, the population of incorporated areas has steadily increased aside from the loss and leveling out that occurred after 1980. In the past decade, the region's incorporated area experienced a 1% increase while the unincorporated area experienced a 4% decrease. In absolute numbers, the incorporated area increased by 841 while the unincorporated area decreased by 1,019, which reflects the overall 0.2% decrease in the region's population.

Incorporated and Unincorporated Area Population Change at the Region 6 Level 2000 – 2010

	2000	2010	Change
Incorporated Area	70,139	70,980	1.2%
Unincorporated Area	24,902	23,883	-4.1%

Data Source: State Data Center of Iowa, September 2012

Overall, population losses occurred in both the unincorporated areas and small cities in the region. However, most losses in the incorporated areas occurred in the smallest cities in the region that have a population less than 1,000. The two counties with a population decrease—Hardin and Tama—contain some of the smallest cities in Region 6. A concentration of smaller cities may explain a lack of growth in the incorporated areas that would otherwise offset the traditional loss of population in the unincorporated areas.

#### **Population Trends**

#### Age

Overall, Iowa's population is aging and becoming more ethnically diverse. Over half of Iowa's population increase from 2000 to 2010 is attributed to the growth in the Hispanic and Latino population. This trend is relevant in Region 6 counties.

The population of the Region is aging. The median age of residents in Hardin, Marshall, Poweshiek, and Tama Counties currently ranges from 38.5 to 44.4 years of age. Marshall and Poweshiek Counties experiences a decrease in median age, while Hardin and Tama showed slight increases.

Median Age in 2000, 2010 and 2017

	2000	2010	2017
Hardin	40.6	43.7	44.4
Marshall	38.6	39.6	38.5
Poweshiek	38.4	41	40.7
Tama	39.1	41.8	43.2
Iowa (State)	36.6	38.1	38.1

Source: U.S. Census Bureau, 2012, 2017 ACS Survey, 2018

Between 2000 and 2017, all areas in the region experienced slight increases in population over 65. The largest percentage increase was in Poweshiek County.

Percentage Aged 65 and Over in 2000, 2010 and 2017

	2000	2010	2017
Hardin	20.7%	21.0%	20.9%
Marshall	16.4%	16.4%	17.3%
Poweshiek	17.6%	18.4%	19.4%
Tama	18.7%	18.4%	19.1%
Iowa (state)	14.9%	14.9%	16.1%

Source: U.S. Census Bureau, 2012; 2017 ACS Survey, 2018

Compared to the state, counties in Region 6 have older median ages and a higher overall percentage of the population that is aged 65 and over. Data from Census 2010 shows that Iowa's median age is just over 38 and the population aged 65 and over is just under 15%, which are a few years and percentage points lower than Region 6. The needs of this age cohort should be considered when planning for future transportation facilities and activities.

#### **Natural Change**

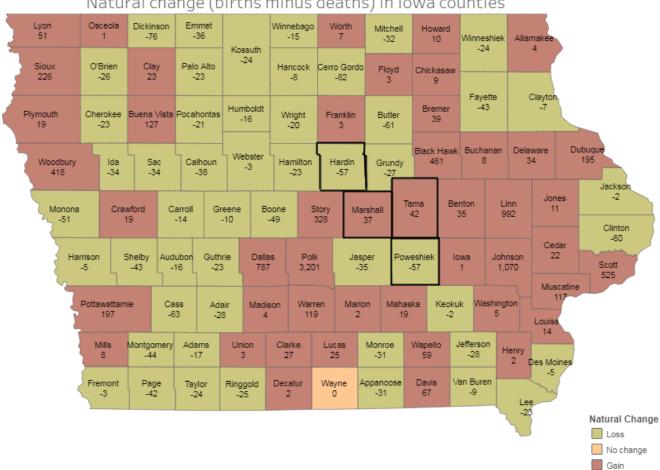
Natural change highlights how important in-migration is to slow down population losses in the region. Natural change in population is the number of births minus the number of deaths, which excludes population increase or decrease due to migration. In Region 6, in 2017, natural change was extremely small and net positive.

Natural Change in Region 6 Area, 2017

	Births	Deaths	Natural Change
Hardin	172	229	-57
Marshall	505	468	+37
Poweshiek	166	223	-57
Tama	241	199	+42
Region 6	1084	1119	-35

Source: State Data Center of Iowa, 2018

Natural change (births minus deaths) in Iowa counties



Source: State Data Center of Iowa, 2018

#### **Race and Culture**

Since the region's population is aging and natural change is quite low, increasing in-migration will be an essential factor in maintaining or increasing the population. While the Region 6 population is predominantly white with a European heritage, a major increase in minorities may be the primary driver of population growth in the region's future based on 2000 and 2010 U.S. Census data comparison. As a note for this section of the plan, Hispanic refers to people who speak Spanish and/or are descended from Spanish-speaking populations, while Latino refers to people who are from or descended from people from Latin America.

In Region 6, there has been a definite increase in the proportion of Hispanic and Latino population from 2000 to 2010, especially in Marshall and Tama Counties. The Hispanic and Latino population in Marshalltown makes up 29% of total population while the Hispanic or Latino population in the City of Tama makes up 26.5% of total population. Hardin and Poweshiek Counties experienced a modest increase of about 1%, while the percentage in Marshall and Tama County nearly doubled.

Dorcontago	Uicnanic	or Latino	in 2000	, 2010 and 201	17
Percentage	піѕрипіс	or Launo	III ZUUU,	, 2010 ana 20.	1/

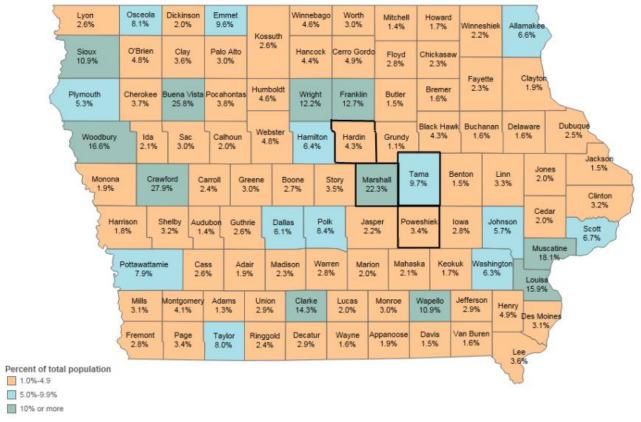
	2000	2010	2017
Hardin	2.4%	3.7%	4.2%
Marshall	9.0%	17.3%	20.7%
Poweshiek	1.2%	2.4%	3.1%
Tama	3.8%	7.4%	8.7%
Iowa (state)	2.8%	5.0%	5.7%

Source: U.S. Census Bureau, 2012; 2017 ACS Survey, 2018

Hardin and Poweshiek Counties have a lower proportion of Hispanic and Latino residents, although they are also seeing a slight growth in this demographic. Marshall County has an incredibly high rate of Hispanic or Latino residents that continues to grow. In 2017, this demographic represented over 20% of the overall population in the county. This demographic is driving much of the population growth in the region.

Compared to the State of Iowa's percentage, Marshall County has a much higher proportion of Hispanic and Latino residents. Some of the larger counties in Iowa—Polk, Scott, and Woodbury—have a larger Hispanic and Latino population in absolute numbers, but only two other counties in Iowa—Buena Vista (25%) and Crawford (27.4%) —have a higher percentage of Hispanic and Latino residents (2017 American Community Survey, 2018). Other minorities, including Asian, African-American populations, are represented as a small proportion of the total population across the region (2017 American Community Survey, 2018).

#### Latinos as a percent of the total population in Iowa's counties: 2017



Source: State Data Center of Iowa Latinos in Iowa, 2018

For both age and culture, there are important transportation and mobility considerations such as access to healthcare, social services, employment, education, housing, and social connections. Aside from a population increased in age, another important population trend to consider is the major increase in the proportion of Hispanic and Latino residents in Region 6, particularly in Marshall and Tama Counties, and particularly as it affects the way transit and other essential services are dispatched to non-English speaking populations.

#### **Limited English Proficiency (LEP) Populations**

Only a small percentage of the population in the region is made up of people with limited English proficiency (see table). While the Hispanic and Latino population accounted for the majority of population growth and LEP population in the region, there is a large variety of languages represented in the region.

Now that Iowa Premium Beef processing plant in Tama/Toledo is up and running, the percentages may increase at a faster rate, but it is impossible to predict at this time how and how quickly those percentages might change. Moreover, immigrant population data does not take into account those workers who live in a county outside the region and commute to work in the various employment centers in the region. Besides not being counted as a part of the LEP population, these workers

could present a different set of needs for translation and transportation capabilities to get to work and around the area while they are in the region.

Region 6 - Limited English-Speaking Households by County and Region in 2017

	Hardin	Marshall	Poweshiek	Tama	Region
	naram	Harshan	Toweshiek	Tumu	Region
Number of Households in County	7,183	15,541	7,571	6,675	36,970
Number of households speaking Spanish	159	1,951	227	293	2,630
Spanish-speaking LEP households	28	691	29	75	823
Percent of households in county that are Spanish speaking LEP	.3%	4%	.3%	1%	2%
Number of households speaking a language other than English or Spanish*	72	499	165	314	1,050
Non-Spanish speaking LEP households	4	212	2	17	235
Percent of households in county that are non- Spanish speaking LEP	0%	1%	0%	.2%	.6%
Total LEP households in county	32	903	31	92	1,058
Percentage of households in county that are LEP	.4%	6%	.4%	1%	3%

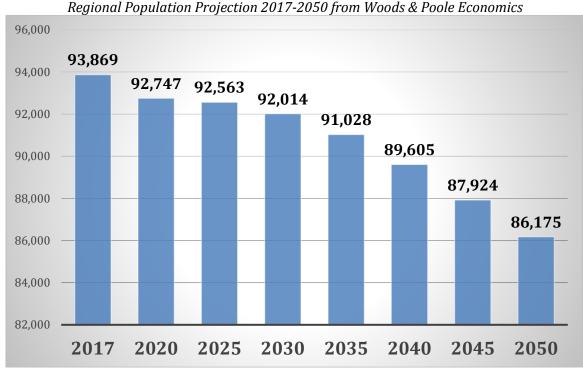
<sup>\*</sup>Other languages include Indo-European languages, Asian and Pacific Islander languages, and "other languages" as characterized by the 2017 ACS Community Survey data.

Data Source: ACS 2013-2017 5-Year Estimates Data Set, 2018

#### **Population Projections**

Based on recent trends, the total population for the region will most likely continue to be stable or perhaps grow in small increments. The Latino and Hispanic population will most likely account for any significant population growth in the region. Tama and Hardin Counties may continue to experience population loss unless job opportunities increase and depending upon affordable transportation opportunities to access employment and essential services located outside the counties.

Woods & Poole Economics, Inc. has projected that the regional population will decrease very slightly in the next decade through 2030 and will then decrease at a more rapid rate through 2050. The trend of persons moving from rural areas into more metropolitan centers that offer more services will likely continue. Marshalltown is projects to see modest growth as rural residents relocate. These projections could be influenced substantially by a large external event, such as the addition or loss of a major employer. If the projection is correct, the region as a whole could see up to an 8% population decline.



Source: Woods & Poole Economics, Inc. 2020

The opening of the Iowa Premium Beef processing plant in Tama County has brought an influx of workers to the Tama area. Impacts on housing and transportation are still being monitored. Future needs, including housing, transportation, education, social services, and medical facilities, will continue to be assessed by local and regional leaders, including Region 6 Planning Commission, Iowa Valley College, and Marshalltown and Tama/Toledo area medical and economic development professionals.

Marshalltown, and even Marshall County as a whole, may experience some changes to population as a result of the EF-3 tornado that touched down in the heart of downtown Marshalltown in July of 2018. Housing stock continues to be repaired and replaced. Over the course of the next several years, an estimated 100 homes could be demolished due to tornado damage. It will take years to rebuild new housing stock. Other housing stock was significantly damaged, including rental housing. Lack of available housing may force Marshalltown residents to relocate within the region to nearby cities, while some affected residents may leave the region altogether. Community leaders anxiously await results from the 2020 census. The community is actively pursuing a slew of projects to provide more money for housing repairs and provide tax incentives to developers of housing and other business investments.

### **Quality of Life Indicators**

A broad analysis of the quality of life in the region is important to consider when planning for future transportation needs. As a key goal is to improve the quality of life for the people who live and work and the region, it is important to understand the level of poverty and financial assistance provided to residents. Areas with high levels of poverty and financial assistance may be facing critical

transportation challenges.

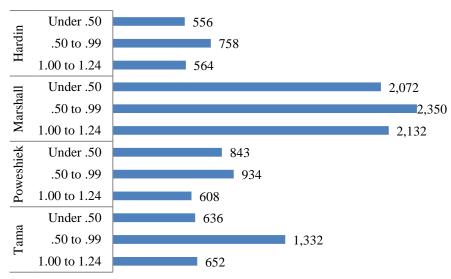
#### **Poverty**

Poverty and other income-related environmental justice issues should be considered before any future passenger transportation projects are planned. One way of determining the extent of poverty in Region 6 is analyzing the ratio of income to poverty level. This indicator specifically identifies how income compares to the set poverty level for a county.

An individual with income that is half of the income set as the level of poverty for a county has a ratio of .50, and an individual that has an income level equal to the income set as the level of poverty for the county has a ratio of 1.00. If an individual's income exceeds the poverty level income for the county, the ratio will be greater than 1.00. However, just because the individual is not considered to be living at poverty level does mean this person may not struggle financially.

In Marshall County, there are 6,554 people with income levels below, near, or just above the poverty level. Marshall County has the largest number of individuals who may be affected by poverty in the Region 6 area.

Ratio of Income to Poverty Level (2013-2017 Estimates)



Source: State Data Center of Iowa, 2018

# Percentage of 2017 Population with .50 – 1.24 Income Ratio (2013-2017 Estimates)

County	Number of People Below, At, or Just Above Poverty Level	Percent of Total Population
Hardin	1,878	11.4%
Marshall	6,554	16.6%
Poweshiek	2,385	14.3%
Tama	2,620	15.6%

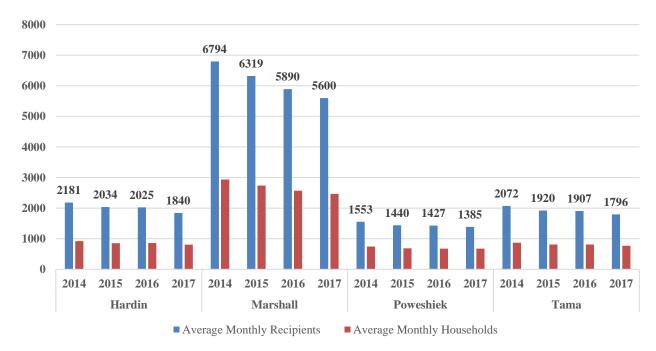
Source: Calculated using data from State Data Center of Iowa Ratio of Income to Poverty Level, 2018. Data derived from 2013-2017 American Community Survey 5-Year Estimates

#### **Financial Assistance**

Other indicators of poverty are the rate of financial assistance and medical coverage. Note that income is not the only qualifier for certain medical coverage like Medicaid (i.e.: dialysis). Unlike poverty data, temporal data for assistance programs are available to identify trends in the region.

The number of households receiving food assistance has steadily decreased across the region in all counties since the height of the Great Recession. Over the past four years, all counties showed a consistent and steady decrease in both average monthly recipients and average monthly households. Marshall County had the largest number of recipients in 2017 with 5,600. According to the ACS Survey that put Marshall County's population at 40,476, nearly 14% of people in the county receive benefits from the Food Assistance Program.

Food Assistance Program in Region 6 Area (formerly known as Food Stamps)



Data Source: State Data Center of Iowa Food Assistance Program Data, 2018

For Medicaid, the eligible recipients and recipients served increased from 2001 to 2011, Unfortunately, a more up-to-date dataset is not available on the State Data Center of Iowa. The increase in the region from 2001 to 2011 varies by county ranging from approximately 40% in Hardin County and over 135% in Tama County. In all counties except Marshall, the average Medicaid benefits per person decreased. Average benefits decreased by just \$9 in Hardin County while the average decreased by almost \$70 in Poweshiek and Tama Counties.

Average Medicaid Recipients and Benefits per Month

	Year	Eligible Recipients	Recipients Served	Benefits per Person
Hardin	2001	1,533	1,616	\$637
narum	2011	2,684	2,504	\$628
Marshall	2001	3,807	3,882	\$692
Marshan	2011	8,624	8,057	\$699
Poweshiek	2001	1,183	1,234	\$651
Powesiliek	2011	2,459	2,154	\$582
Tama	2001	1,139	1,198	\$554
rama	2011	2,683	2,358	\$487

Source: State Data Center of Iowa, 2012

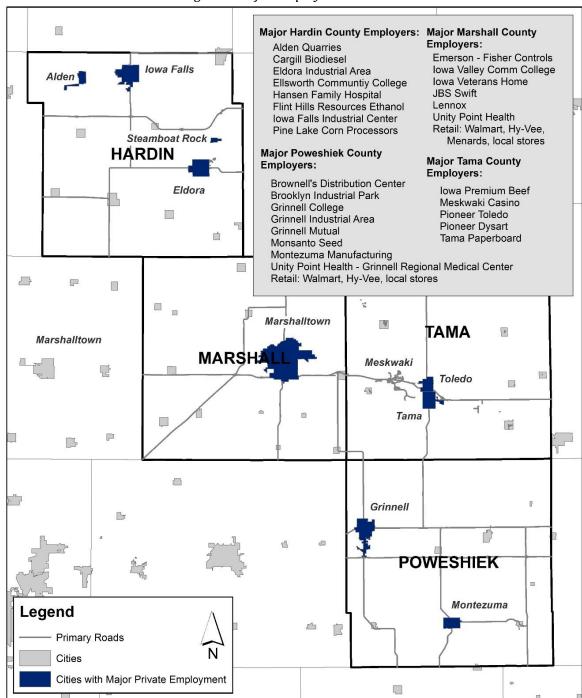
The financial assistance to individuals and households in Region 6 has increased despite a population decrease. The number of people served increased substantially, while the average benefits per person have increased only a small amount or even decreased.

#### **Important Population Considerations**

- ✓ The Region 6 population decreased 3.6% from the 2010 Census data to 2017 ACS population estimates. The region may see a slight population decline in the 2020 Census.
- ✓ Hardin and Poweshiek County experienced the largest decreases in population between 2010-2017.
- ✓ The Hispanic and Latino population accounted for the majority of population growth in the region, especially in Marshall and Tama Counties. Hispanic and Latino population in Marshall County increased by 20.7% from 2010 to 2017. Marshall County has one of the highest percentages of Latinos as a percent of total population.
- ✓ Natural change—births minus deaths—represents a small gain in population for Marshall and Tama County and a small loss in population for Hardin and Poweshiek County.
- ✓ Based on recent trends, the Region 6 population will likely decrease slowly overall, but increase in small increments in larger population centers such as Marshalltown, Grinnell, Iowa Falls, and the Tama/Toledo area. In-migration of Hispanic and Latino populations to the region will offset significant population losses.
- ✓ The median age increased in Hardin and Tama Counties but decreased in Marshall and Poweshiek Counties.
- ✓ In the region, Marshall County has the highest percentage of total population and absolute number of people who are below, near, or just above poverty level.

#### **Economy and Workforce**

A basic understanding of the region's economy will provide a valuable perspective to future transportation needs. A summary of the region's largest employers is below.



Region 6 Major Employment Centers

#### **Employment**

#### **Total Employment**

Total employment in Region 6 was 39,717 jobs in June of 2019 The majority of jobs in the region were in Marshall County – nearly 17,000. The population of Marshall County, however, is much larger than other counties in the region so the difference in the amount of people employed is expected.

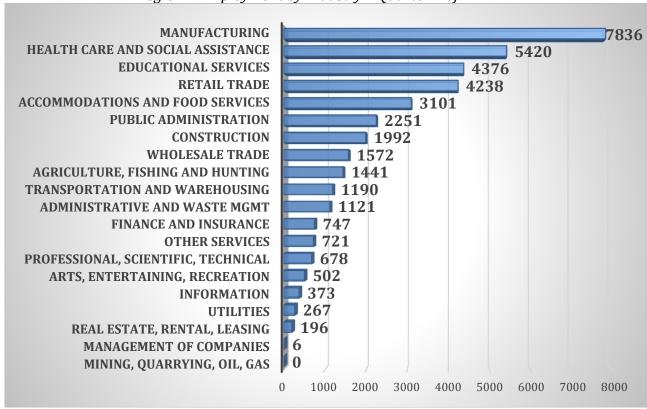
*Employment by County in June 2019 (Quarter 2)* 

County	Number Employed
Hardin	7,015
Marshall	16,881
Poweshiek	10,108
Tama	5,713
TOTAL	39,717

Source: BLS Covered employment and wages in the United States and all counties in Iowa, second quarter 2019

#### **Employment by Industry**

Region 6 Employment by Industry - Quarter 2 of 2019



Source<u>: Iowa Workforce Development</u> Quarterly Census of Employment and Wages (County Employment and Wages) – Derived from BLS data, 2020. Note: total employment and employment by industry numbers may differ due to data suppression and confidentiality restrictions for certain sectors.

#### **Number of Worksites by Industry**

The graph on the previous page shows the largest employment sectors in the region by industry. Manufacturing is the largest with 7,836 workers or 20% of regional employment. Government jobs – including within health care, social assistance, educational services, and public administration – actually make up the largest percentage of employment but involve multiple industry sectors. Below are the number of worksites in the region according to industry. Several major employers contribute many jobs to a concentrated number of worksites (such as manufacturing). Other industries (such as retail trade) have many worksites across the region with less job density at each site. A total of 2,820 worksites were reported in the region according to BLS.

Number of Worksites in the Region by Industry in 2019

Industry	# Worksites	Industry	# Worksites
Retail Trade	329	Manufacturing	126
Construction	290	Public Administration	125
Health Care and Social Assistance	284	Admin and Waste Mgmt	119
Wholesale Trade	215	Educational Services	83
Other Services	192	Real Estate, Rental, Leasing	75
Accommodations and Food Services	186	Information	48
Professional, Scientific, Technical	183	Arts, Entertaining, Recreation	44
Finance and Insurance	179	Utilities	21
Transportation and Warehousing	152	Management of Companies	15
Agriculture, Fishing and Hunting	146	Mining, Quarrying, Oil, Gas	8

Source: <u>Iowa Workforce Development</u> Quarterly Census of Employment and Wages (County Employment and Wages) – Derived from BLS data, 2020.

#### Location of Employers in the Region

Several major private sector employers are listed below. See Appendix A for a list of the region's largest employers.

Ten Major Private Sector Employers in Region 6

Company	Industry	Employer Class Size*
JBS Swift USA	Manufacturing	1,000-4,999
Emerson Process Management – Fisher Division	Manufacturing	1,000-4,999
Lennox Manufacturing	Manufacturing	1,000-4,999
Iowa Premium Beef	Manufacturing	500-999
Grinnell College	Educational Services	500-999
Grinnell Mutual Reinsurance	Finance & Insurance	500-999
Meskwaki Casino & Hotel	Arts & Entertainment	250-499
Unity Point Health - Marshalltown	Health Services	250-499
Hy-Vee (multiple locations)	Retail Trade	Multiple locations
Wal-Mart (multiple locations)	Retail Trade	Multiple locations

Source: Iowa Workforce Development Employer Database accessed in January of 2020. Based on 1274 identified employers in the region This is an estimate to be used for general economic development purposes only.

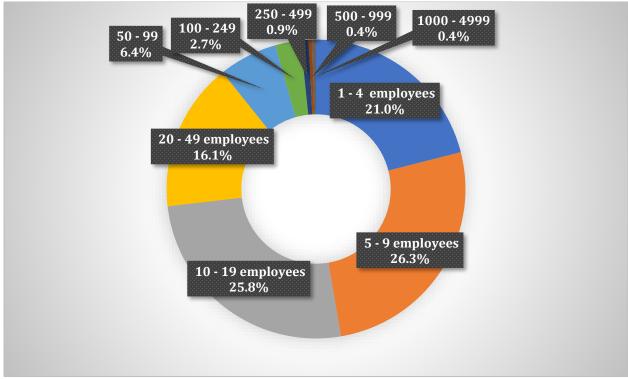
#### **Employer Database**

Based on National Infogroup data from September of 2019, the region has the following employer characteristics:

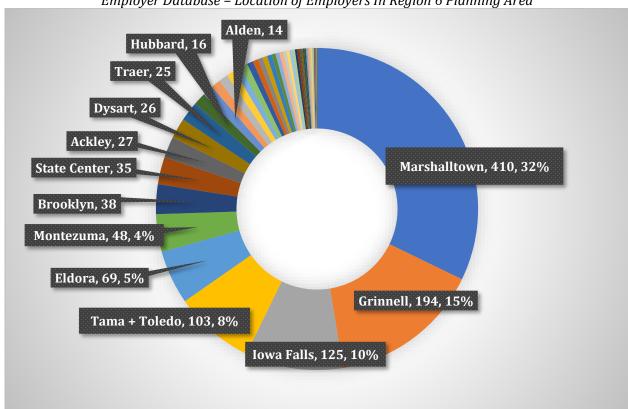
- Micro or Small Enterprises (89.2%)
  1,137 employers in the region have under 50 employees
- Medium-Sized Employers (10%)
   127 employers are between 50 and 499 employees
- Large Employers (.8%) 10 employers have 500 or more employees

There are a total of 1,274 employers across 47 cities with listed employers in the region. Micro or Small Enterprises make up nearly 90% of employers. Note that one employer may have multiple worksites. Employers may also be listed multiple times in this dataset if they have multiple locations in the region or offshoots of their business that are counted in multiple industry sectors. See Appendix A for a list of employers with at least 50 reported employees in the region according to this data set.





Source: <u>Iowa Workforce Development</u> Employer Database accessed January 2020. Based on 1274 identified employers in region.



Employer Database - Location of Employers In Region 6 Planning Area

Source: <u>Iowa Workforce Development</u> Employer Database. Based on 1274 identified employers in region.

#### Other Cities with Fewer than 14 Employers:

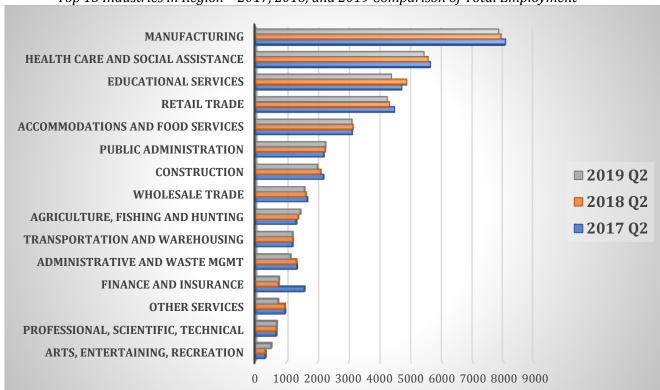
Cities with 1 employer:	Belle Plaine, Elberon, Garden City, Gifford, Reinbeck, Vining
Cities with 2 employers:	Beaman, Buckingham, Guernsey, Haverhill, Lincoln, Liscomb,
	Montour, Victor
Cities with 3 employers:	Garwin, Green Mountain, New Providence
Cities with 4 -6 employers:	Albion, Laurel, Searsboro, Chelsea, Deep River, Hartwick, Clutier, St
	Anthony, Steamboat Rock
Cities with 7-12	Le Grand, Radcliffe, Melbourne, Union, Gladbrook, Gilman
employers:	

Source: <u>Iowa Workforce Development</u> Employer Database accessed January 2020. Based on 1274 identified employers in region.

Marshalltown houses 32% of all employers in the region and 45% of total employment in the region. Note that the employer database identifies 1,274 employers in the region and BLS Quarterly Census from June 2019 identifies 2,820 worksites. Employers with a very small number of employees may not be fully identified in the employer database.

#### **Future Employment**

Changes in industry by total employment is included in the chart above. Manufacturing, the largest industry in terms of total employment in the region, experienced a 3% decline in total employment between 2017 and 2019 (227 jobs lost).



Top 15 Industries in Region – 2017, 2018, and 2019 Comparison of Total Employment

Source<u>: Iowa Workforce Development</u> Quarterly Census of Employment and Wages (County Employment and Wages) – Derived from BLS data, 2020. Note: total employment and employment by industry numbers may differ due to data suppression and confidentiality restrictions for certain sectors.

Five industries experienced total employment growth between 2017 and 2019:

- Arts, Entertaining, Recreation 61% growth (190 jobs)
- Agriculture, Fishing and Hunting 10% growth (134 jobs)
- Public Administration 3% growth (58 jobs)
- Professional Scientific, and Technical 2% growth (14 jobs)
- Transportation and Warehousing .3% growth (3 jobs)

Below are the top 20 industries in the region based on 2016 estimates of employment and their projected growth to 2026. As with all projections, the amount of growth projected is a product of assumptions applied to current data. Projections should be used to identify general trends in employment that are likely to occur rather than definite outcomes. At the time of this plan update, this projection was the most long-term projection product available. The projection has not been updated since 2016.

Region 6 Top 20 Industries by Employment (Projected)

Industry Description	2016	2026	Total	Percent
Total All Industries (Nonag)	<b>Estimated</b> 45,190	Projected 48,295	<b>Growth</b> 3,105	Change 6.9%
Educational Services	5,070	5,415	345	6.8%
Self Employed and Unpaid Family Workers	4,470	4,735	265	5.9%
Food Manufacturing	3,125	3,330	205	6.6%
Local Government, Excluding Education & Hospitals	2,910	3,015	105	3.6%
Nursing and Residential Care Facilities	1,955	2,185	230	11.8%
Food Services and Drinking Places	2,020	2,175	155	7.7%
Ambulatory Health Care Services	1,240	1,530	290	23.4%
Administrative and Support Services	1,205	1,445	240	19.9%
Specialty Trade Contractors	1,155	1,315	160	13.9%
State Government, Excluding Education & Hospitals	1,325	1,315	-10	-0.8%
Fabricated Metal Manufacturing	1,310	1,280	-30	-2.3%
Food and Beverage Stores	1,145	1,165	20	1.7%
Machinery Manufacturing	1,090	1,110	20	1.8%
Hospitals	1,050	1,080	30	2.9%
General Merchandise Stores	965	1,010	45	4.7%
Religious, Grantmaking, Civic, Professional Orgs	920	955	35	3.8%
Heavy and Civil Engineering Construction	870	950	80	9.2%
Gasoline Stations	870	950	80	9.2%
Insurance Carriers and Related Activities	870	930	60	6.9%
Wood Product Manufacturing	785	905	120	15.3%

Source: Iowa Workforce Development <u>Industry Projections</u>. Accessed 2020

#### **Recent Notable Growth**



Recently, the region has seen notable growth in a few areas. Brownells Inc. built a 245,000 square foot distribution center with a 7,000 square foot retail store just off Exit 182 of Interstate 80 in Grinnell, Iowa. Brownells was once located in Montezuma, Iowa; however, due to growth the old facility no longer met Brownell's needs. With the addition of the new Grinnell facility, Brownells moved Crow Shooting Supply Company into their old facility in Montezuma (Source: Brownells).



In November of 2014, Iowa Premium Beef reopened an idle beef processing plant located in Tama, Iowa. Currently, Iowa Premium Beef employs over 900 full-time employees; however, due to the lack housing in the area the majority of those employees commute to Iowa Premium Beef each day. During interviews with local officials, one of the main identified needs for the surrounding communities was safe, clean, and affordable housing to meet the growing housing demands of the area.



In 2016, Alliant Energy began construction on a new natural gas-fired electric generation station in Marshalltown, Iowa. During the construction phase of the project, over 800 persons were employed at the site. Nearly \$50 million came into the local community to local vendors and suppliers. The new 650 Mega Watt capacity generation station replaced 14 less efficient, smaller generation units. The total investment for the generation station came in at \$645 million representing the largest project investment in Marshall County, Iowa (Source: Marshalltown Times Republican).

#### **Important Economy and Workforce Considerations**

- ✓ Total employment in Region 6 was nearly 40,000 jobs in June of 2019. Nearly half of the jobs (42.5%) are located in Marshall County.
- ✓ The largest employment sector in the region is manufacturing 7,836 jobs, or 20% of regional jobs. Other major employment sectors in the region include health care, educational services and retail trade.
- ✓ The region has the following employer characteristics:

Micro or Small Enterprises (89.2%) 1,137 employers in the region have under 50 employees

Medium-Sized Employers (10%) 127 employers are between 50 and 499 employees

Large Employers (.8%) 10 employers have 500 or more employees

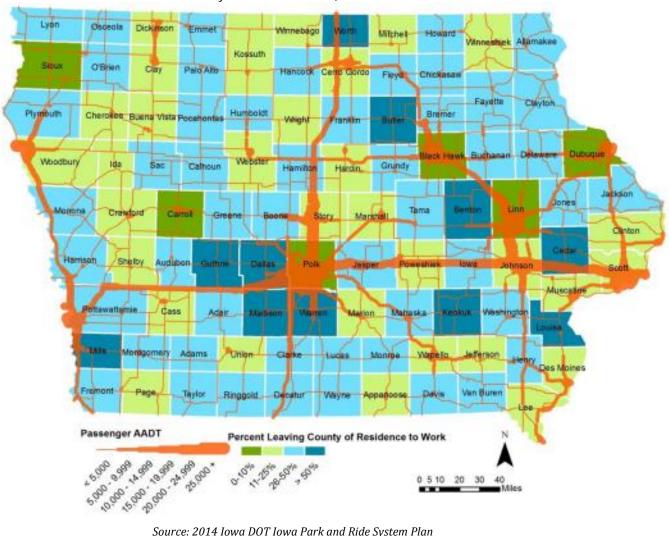
- ✓ Major private employers in the region are located in all four counties in the region. These large employers contribute significantly to total employment jobs numbers.
- ✓ From 2017 to 2019, the region experienced a 5% loss of employment in the region by industry, or a total of 2,148 jobs lost. The industry sectors with the greatest losses were finance/insurance, educational services, health care and social assistance.
- ✓ The two industry sectors that are projected to grow the most in terms of total employment for the region include educational services, food manufacturing, and local governments.
- ✓ Ambulatory health care services, administrative support services, and specialty trade contractors are the industries projected to have the largest percentage increases in their respective industries.
- ✓ Based on local information, there will likely be growth in the number of jobs in the region. Several large employers have recently expanded, and there are additional plans for expansion depending on industry factors and other market conditions.

## **Commuting Patterns**

Passenger average annual daily traffic (AADT) on primary highways shows high usage patterns in the following areas:

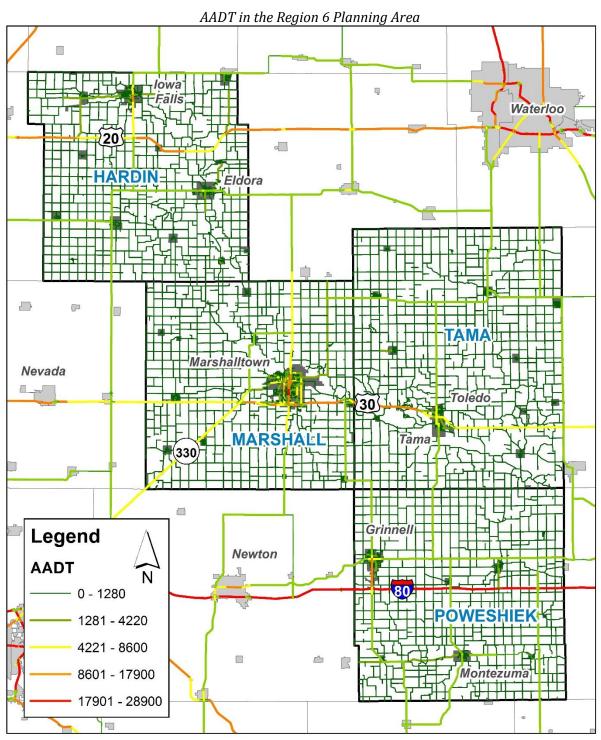
- Between Marshalltown and Tama/Toledo using Highway 30
- Between Marshalltown and Des Moines metro using Highway 330
- High traffic through Poweshiek County using Interstate I-80
- High traffic through Hardin County using Highway 20

Passenger average annual daily traffic on primary highways and percent of workforce leaving county of residence to work, 2010



Source: 2014 Iowa DOT Iowa Park and Ride System Plan

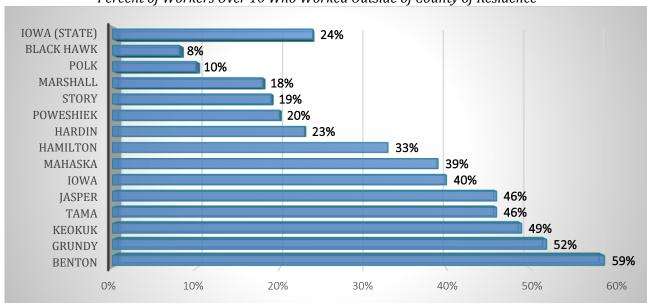
If we take a closer look at AADT on all roads in the region, there is a distinct pattern of travel between Marshalltown and the Tama/Toledo area using Highway 30. In addition, the major highways of Highway 20, Highway 30, Highway 330, and Interstate I-80 have high AADT. Spatial patterns in this AADT data have a direct connection to the major employment centers of Marshalltown, Grinnell, Iowa Falls, Tama/Toledo and Eldora as discussed in the previous section.



Source: Iowa DOT 2017 Traffic Counts

#### **Travel Outside of County for Work and Commute Time**

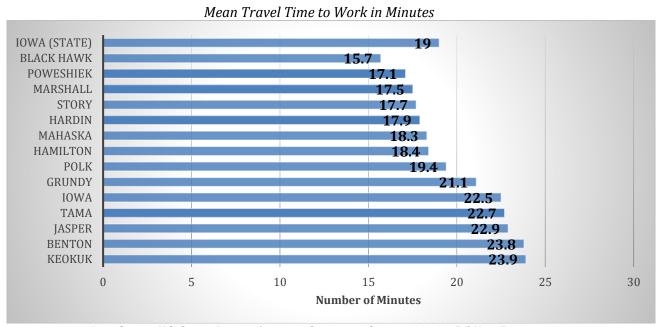
Based on data from a 14-county area that includes the Region 6 planning area, Tama County has the  $4^{th}$  highest percentage of workers who reported that they do not work in the county in which they live.



Percent of Workers Over 16 Who Worked Outside of County of Residence

Data Source: U.S. Census Bureau, American Community Survey, 2013-2017 5-Year Estimates

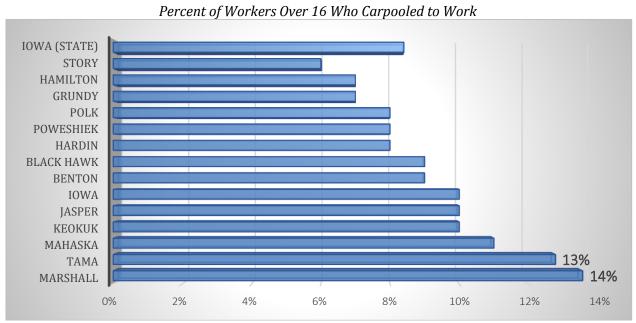
Of counties in the Region 6 planning area, Poweshiek County has the shortest average commute time of 17.1 minutes and Tama County has the longest average with 22.7 minutes. More information about commuting patterns is available in Appendix B using the US Census Bureau's "On the Map" tool.



Data Source: U.S. Census Bureau, American Community Survey, 2013-2017 5-Year Estimates

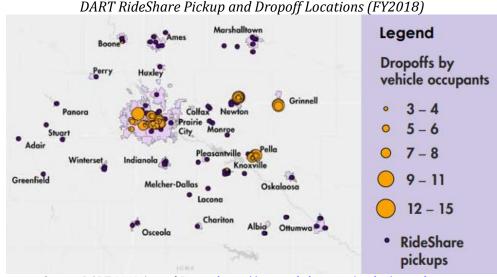
### **Carpooling**

Especially in rural areas like the Region 6 planning area, long commute times with single drivers are common. However, the rate of reported carpooling in Marshall and Tama Counties is high, even when compared to other surrounding counties.



Data Source: U.S. Census Bureau, American Community Survey, 2013-2017 5-Year Estimates

One way that commuting workers can carpool is through RideShare vanpool services. The map below depicts DART vanpools that already exist with both pickup and dropoff locations in Marshalltown and Grinnell. Several major employers in the region have an interest in offering a vanpool program in an effort to increase employee retention for those with longer commutes.



Source: DART 2018 Annual Report https://www.ridedart.com/media/annual-report

Marshall County contains more than double the number of occupied housing units and also has the highest percentage of households with no vehicle available (6.9%). This percentage is higher than the overall state average. All of the households with no vehicle available or only one vehicle available across the region could be an untapped market for vanpools. A large proportion of workers in Marshall County already report commuting. The number of workers reporting working from home may substantially increase over time.

### Number of Vehicles Available In a Household - By County

	Iowa (State)	Hardin	Marshall	Poweshiek	Tama
Occupied housing units	1251587	7,183	15,541	7,571	6,675
No vehicles available	5.7%	5.5%	6.9%	4.7%	3.4%
1 vehicle available	29.9%	30.3%	29.8%	30.5%	24.5%
2 vehicles available	39.1%	38.2%	38.6%	39.1%	38.4%
3 or more vehicles available	25.4%	25.9%	24.7%	25.7%	33.7%

Data Source: U.S. Census Bureau, American Community Survey, 2013-2017 5-Year Estimates

## *Commuting to Work – By County*

	Iowa (State)	Hardin	Marshall	Poweshiek	Tama
Workers 16 years and over	1,573,318	8,443	18,900	9,461	8,324
Car, truck, or van drove alone	81%	82.9%	76.7%	72.3%	78.8%
Car, truck, or van carpooled	8.4%	7.7%	14.6%	7.5%	12.8%
Public transportation (excluding taxicab)	1.1%	0.1%	0.1%	0%	0.1%
Walked	3.4%	4.3%	3.1%	13.6%	3%
Other means	1.5%	1.2%	1.8%	2.4%	1.5%
Worked at home	4.6%	3.8%	3.5%	4.2%	3.9%

Data Source: U.S. Census Bureau, American Community Survey, 2013-2017 5-Year Estimates

### **Commuting Patterns Considerations**

- ✓ AADT is highest in the region in the following areas:
  - Between Marshalltown and Tama/Toledo using Highway 30
  - Between Marshalltown and Des Moines metro using Highway 330
  - High traffic through Poweshiek County using Interstate I-80
  - High traffic through Hardin County using Highway 20
- ✓ AADT has a direct connection to the major employment centers of Marshalltown, Grinnell, Iowa Falls, Tama/Toledo and Eldora.
- ✓ Tama County has a high percentage (46%) of workers who reported that they do not work in the county in which they reside. Average travel time to work in minutes is also very high for Tama County workers.
- ✓ Carpooling is common in Marshall and Tama Counties 14% of workers in Marshall County and 13% of workers in Tama County report that they already carpool to work. Vanpool data from the DART RideShare program indicates that vanpools already exist in Marshalltown and Grinnell.
- ✓ There could be an unmet need in the region for additional vanpool, rideshare, or other commuting alternatives. Several major employers in the region have an interest in offering a vanpool program in an effort to increase employee retention for those with longer commutes.

#### CHAPTER 4: EXISTING REGIONAL TRANSPORTATION SYSTEM

The transportation system allows people and goods to move within and outside Region 6, which is extremely important to the region's economy and the quality of life of its citizens. The Region 6 transportation system contains several modes, including basic automobile transportation, semitruck and rail freight, public transit, municipal airports, pedestrian and bicycle infrastructure, and pipelines.

The background and analysis of the transportation system in Region 6 will focus on the basic components of the system and discussions with staff in Region 6 counties and cities regarding current conditions, future plans, and perceived challenges.

## Roads, highways and Bridge Network

#### **Highway System**

A highway system connects Region 6 counties and Region 6 to the state of Iowa

and beyond. U.S. Highways 65 and 63, and State Highways 14, 21, and 146 run north-south; U.S. Highway 20, State Highways 175, 6, and 30, and Interstate 80 all serve the Region from east to west. To make travel east and west more efficient, U.S. Highway 30 has been widened to four lanes in Marshall and part of Tama Counties. A bypass of Tama and Toledo was also added in Tama County.

Additionally, State Highway 330 is a four-lane highway that connects the region from Marshall County to Ankeny, Altoona, Bondurant, and the Des Moines area. These major roads are the primary routes used by private individuals and semi-trucks traveling within and through the region. The map below illustrates the volume of traffic for cars on an average day for the road systems in the region.

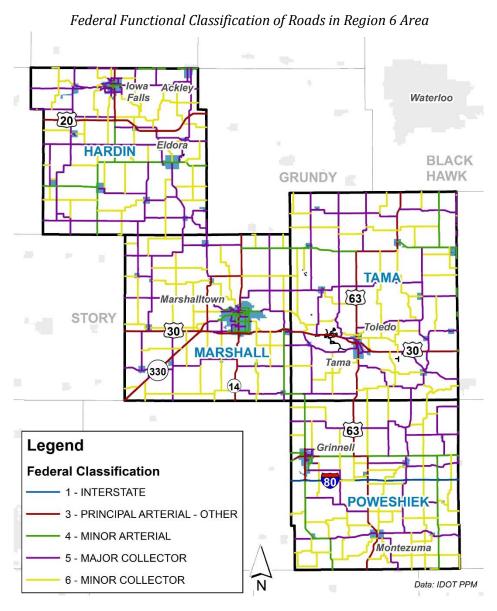
Highway System in Region 6 Area Iowa Falls Alden **HARDIN** 20 175 Radcliffe Union Gladbrook Dysar **MARSHALI TAMA** 30 Le Grai (14)330 **POWESHIEK** 6 Legend Counties Montezuma Cities Major Highways 146 Primary Roads

## Federal Functional Classification (FFC)

Highways and roads are categorized according to the Federal Functional Classification (FFC) to describe the level and type of use on the road. The FFC system serves as a basis for how some state and federal transportation dollars are allocated. The FFC categories are as follows:

- 1 Interstate
- 2 Other principal arterial
- 3 Minor arterial
- 5 Major collector
- 6 Minor collector
- 7 Local

See the map of FFC routes in the Region 6 area to the right. See Appendix C for an FFC map for each county in the service area.



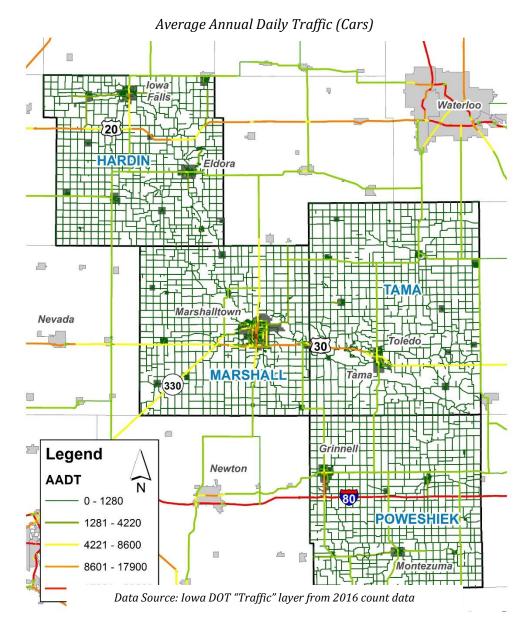
48

## **Average Annual Daily Traffic (AADT)**

High traffic areas in the region according to measured AADT in 2016 include:

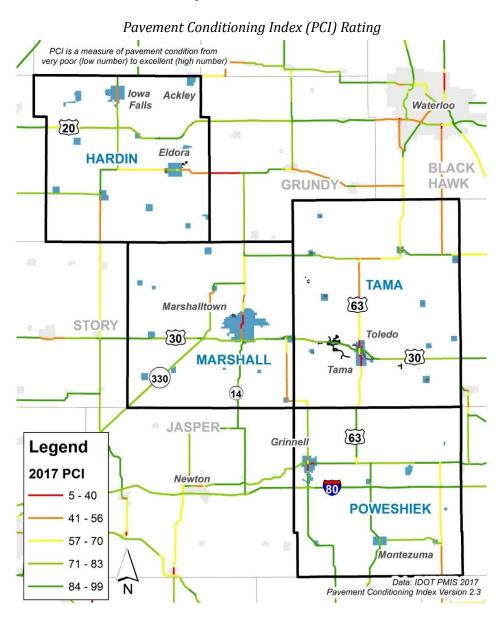
- Interstate I-80 just west of the Grinnell exit: 28,900 average traffic counts per day
- Interstate I-80 east of Grinnell to Poweshiek County line: 28,100 per day
- State Highway 14 in central/south central Marshalltown:19,700 per day
- US Highway 30 just east of Marshalltown: 13,300 per day
- State Highway 146 in south central Grinnell: 11,700 per day
- US Highway 30 near Meskwaki exits: 10,000 per day
- US Highway 20 in western Hardin County: 8,900 per day

There are also various urban routes in Marshalltown and Grinnell that rank higher in daily AADT that most routes in the service area that are too numerous to individually list. See the AADT map for the area below.



#### **Pavement Condition**

The condition of pavement is important to consider. If condition is low, the road cannot fully serve its intended purpose and traffic level. The PCI rating is a 0-100 ranking that measures the condition of interstate and state highway systems. This system helps the state identify pavement improvement needs. Below is a map showing PCI ratings in the area according to 2016 data. The Iowa Pavement Management Program (IPMP) is housed at the Institute for Transportation at Iowa State University, provides detailed pavement data, including interactive maps. Additional information can be found at <a href="https://ctre.iastate.edu/ipmp/">https://ctre.iastate.edu/ipmp/</a>. Roads on the map below are under state jurisdiction for maintenance and repair.



The current pavement condition in the region is generally good for roads under state jurisdiction. A few areas in the region that are in worse condition include:

- State Highway 175 that runs parallel to US Highway 20. The segment just east of Eldora in Hardin County and parts of Grundy County has a PCI of between 5-56.
- State Highway 14 that runs north/south through Marshalltown. Portions of this area were resurfaced in summer of 2019.
- US Highway 63 that runs north/south through Tama/Toledo. This segment has a PCI that is in the 5-40 range.

Future transportation investments in the region at the state level should consider these areas for future transportation infrastructure improvement. For local roads, the priority for counties and cities in the region is maintaining the current roadway systems to ensure safe and efficient travel. The challenge in maintaining the existing road system is sufficient funding. Projects are being prioritized so that highly traveled routes or potential bottlenecks in the system have funding priority.

#### **Bridges**

Bridges are a major concern due to the large number with insufficient ratings and the high cost of replacement. There are 1,128 in-service bridges in the four-county area that are included on the National Bridge Inventory with 31% of the bridges having been identified as structurally deficient. To explore bridge conditions in Iowa, visit the Iowa DOT's interactive mapping product, A Story Map of Iowa's Bridges: <a href="https://arcg.is/lueC81">https://arcg.is/lueC81</a>.

*Inventory of Bridges in Region by County* 

County	Good Condition	Fair Condition	Poor Condition (Structurally Deficient)	Total Number of Bridges	Structurally Deficient Percent
Hardin	93	109	40	242	16.5%
Marshall	101	92	115	308	37.3%
Poweshiek	62	105	94	261	36.0%
Tama	108	111	116	335	34.6%
TOTALS	364	417	365	1146	31.8%

Source: Iowa DOT, A Story May of Iowa's Bridges https://arcg.is/1ueC81

#### Ownership of Structurally Deficient Bridges by County

County	State Owned	County Owned	City Owned	Total Structurally Def. Bridges
Hardin	0	37	3	40
Marshall	0	111	4	115
Poweshiek	3	89	2	94
Tama	0	115	1	116
REGION TOTALS	3	352	10	365

Source: Iowa DOT, A Story May of Iowa's Bridges https://arcg.is/lueC81

#### **State-Owned Structurally Deficient Bridges**

There are three state-owned structurally deficient bridges in Poweshiek County. These bridges will be replaced over the next 2-3 years. These bridges are on Interstate I-80 at or near the Highway 146 intersection.

### **City-Owned Structurally Deficient Bridges**

City-owned structurally deficient bridges are as follows by county:

- *Hardin County:* 1 in Alden (Main St Bridge over Iowa River), 2 in Iowa Falls (S. River St Bridge, River Road Bridge). All 3 bridges are restricted but not closed.
- *Marshall County:* 4 in Marshalltown (S Center St Bridge over RR viaduct and S Center St Bridge over drainage ditch, W State St and S 16<sup>th</sup> St). None are restricted.
- *Poweshiek County:* 1 in Searsboro, 1 in Brooklyn (S Orchard St). Both bridges are restricted but not closed.
- *Tama County:* 1 in Traer (1st St). Bridge is restricted by not closed.

Of the ten city-owned bridges that are structurally deficient, several are in the process of lining up funding for repair or replacement:

- Alden (Main Street bridge over Iowa River): This project is listed in the current State Transportation Improvements Program for FY 2021. Since this is a historic bridge, the letting schedule will likely be delayed, making FY2022 or FY 2023 more realistic letting targets.
- Searsboro: On the city bridge candidate fund list. Matching funds will be an issue.
- Brooklyn: On the city bridge candidate fund list.
- Traer: Was on the city bridge candidate fund list and has been allocated \$592,000 in grant funds for a \$740,000 total project.

While some of these city-owned bridges are seeking funding through the City Bridge Fund program, funding sources to replace city-owned bridges remain very limited. The structurally deficient city bridges may be able to be replaced in the next 5-8 years. All the priority bridge replacements will happen as soon as possible. Several of these bridges are local bridges with little traffic, so available city funding is prioritized to other, more immediate local projects.

### **County-Owned Structurally Deficient Bridges**

There are 352 county-owned bridges in the region that are structurally deficient. A county or city may select a bridge for replacement funding based upon many variables, including but not limited to: bridge structural condition, road functional classification, traffic counts, local bridge importance, width of bridge, available funding, and impact of weight ratings or closure.

Funding sources to replace county bridges are also limited when compared to the number of bridges in need of replacement. Counties have historically relied upon 80% federal bridge funding to replace bridges. This federal bridge funding is largely federal gas tax based, which has not changed for many decades. Local funding is generally 20% of the cost of bridge replacements. This funding is largely set by Iowa Code levels, and those rates have not changed significantly over time. Some counties are authorized by the county electorate to use part of the local option sales tax (LOST) funds for bridge needs. In the Region 6 region, both Marshall County and Poweshiek County use LOST funds to add funds to replace bridges. Marshall County uses \$700-800k per year in LOST

funds for bridges, which is authorized by referendum. Poweshiek County uses \$300-320k per year is LOST funds for bridges, which is also authorized by referendum. For several decades, there has been a backlog of bridge funding – federal, state and local funds.

Restrictions on	Bridges i	by County

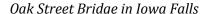
County	Restricted	Closed	Unrestricted	<b>Total Bridges</b>
Hardin	29	2	211	242
Marshall	102	3	203	308
Poweshiek	87	4	170	261
Tama	96	9	230	335
TOTALS	314	18	814	1146

Source: Iowa DOT, A Story May of Iowa's Bridges https://arcg.is/1ueC81

Since Region 6 is primarily rural, maintenance issues include single-axle wagons, usually an agricultural implement, which places an extremely heavy point load on roads and bridges. Bridges are especially a challenge due to posted load limits increasingly being ignored by implement operators. Extra heavy semi-truck loads are also a maintenance issue in certain areas in the region. Visit Appendix F for maps of structurally deficient bridges by county.

#### **Hardin County Bridge Priorities**

A large project that was completed in 2010 in Hardin County is the replacement of the bridge in Iowa Falls on U.S. Highway 65/Oak Street, which spans the Iowa River. Since this bridge is along a state route, the Iowa Department of Transportation financed and completed the replacement of this bridge. Keeping the historic and natural character of the area, the bridge was designed with architectural elements in the spirit of the original bridge design.



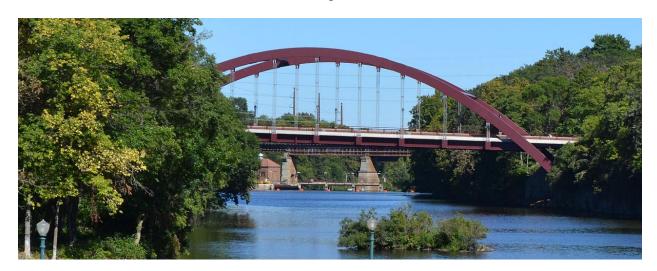


Photo by Ann Sullivan-Larson, obtained from Wikipedia in 2020

One upcoming bridge project in Hardin County is the Historic Main Street Bridge over the Iowa River in downtown Alden. The bridge was originally built in 1936 and is listed on the National Register of Historic Places. This bridge has been identified as structurally deficient.

#### Alden Bridge in Hardin County



Photo Source: Iowa DOT Historic Bridges: <a href="https://iowadot.gov/historicbridges/historic-bridges/alden-bridge">https://iowadot.gov/historicbridges/historic-bridges/alden-bridge</a>

There are several bridge rehabilitation projects taking part as a result of the development of the Iowa River's Edge Trail. Once complete, the 34-mile trail will connect communities along the Iowa River in Hardin and Marshall Counties. Bridge locations along the Iowa River's Edge Trail are shown in the Appendix D. There are 18 total bridges in Hardin County, and 11 in Marshall County that are associated with the Iowa River's Edge Trail.

#### **Marshall County Bridge Priorities**

Natural hazards and their effect on travel in is another major issue in the region. Generally, any water crossing in the road system has the potential for flooding. In Hardin, Marshall, and Tama Counties, a major source of flooding is the Iowa River and associated creeks. These waterways can cause complete closure of bridges due to complete inundation and required inspection. Historically, problem spots for road close due to flooding in Marshalltown are the roads getting into Marshalltown from the North – Highway 14, Highway 330, East Main Street, and Center Street.

A large bridge project in Le Grand was completed in 2019. The Iowa State Highway 146 bypass bridge was replaced just outside of Le Grand. The project will allow drivers to drive over the Union Pacific Railroad's main line instead of waiting for trains. Since this bridge is along a state route, the Iowa Department of Transportation financed and completed the replacement of this bridge. Union Pacific paid for 5% of the project costs.



Construction on the Le Grand overpass over Highway 146 in Spring of 2019. Photo Source: Marshalltown Times Republican.

Another large upcoming bridge project will be the \$2.7 million replacement of two North Center Street bridges (G15 and G10) in northern Marshalltown. The bridges currently have a 15 ton and 10 ton weight limit. These bridges have been identified as structurally deficient.



The North Center Street Bridge in northern Marshalltown. Photo source: Marshalltown Times Republican.

These bridges are extremely important because they provide access to and from Marshalltown over the Iowa River on the north side of the city. These bridges also provide access to Marshalltown's water treatment facility that serves the city and Central Iowa Water Association. The water association's customer base covers not just Marshall County but also parts of Tama, Story, Hardin, Grundy, and Northeast Iowa to nearly Dubuque. In addition, the largest bridge that spans the Iowa River serves as a support for a 24 inch water main that feeds Marshalltown and a natural gas line that provides power to the water treatment facility.

### **Poweshiek County Bridge Priorities**

The road and bridge system in Poweshiek County is unique in the region as Interstate 80 runs through the southern portion of the county and bridge issues are minimal since there are fewer bridges here than in other areas of the region. Despite these differences, Poweshiek County does have funding constraints like all counties in the region. Necessary maintenance and replacements are prioritized to ensure funds are used efficiently. It should be noted that rural bridges with posted weight restrictions are still an issue in Poweshiek County. The posted restrictions are often ignored, resulting in further damage and instability of structures.

One bridge that has been identified as structurally deficient is in Searsboro and is also owned by that local municipality. The bridge has been listed on the city bridge fund list for some time. The bridge has been identified as structurally deficient, but it is not closed at this time. A weight limit has been posted for this bridge to prevent further damage.

Searsboro Bridge Over English Creek on 4th Street



Photo Source: <a href="http://bridgehunter.com/ia/poweshiek/searsboro/">http://bridgehunter.com/ia/poweshiek/searsboro/</a>

The City of Brooklyn also has a city-owned bridge on the city bride program list. The bridge was built in 1912 over Little Bear Creek (Orchard Street) and has been identified as structurally deficient.

Brooklyn Bridge Over Little Bear Creek on Orchard Street



Photo Source: https://bridgehunter.com/ia/poweshiek/820/

### **Tama County Bridge Priorities**

Issues in unincorporated Tama County include several extended closures of bridges due to safety concerns. These bridge closures require rerouting of traffic that can be inconvenient for people who live near the bridge. Overall, there is noticeable deterioration of most bridges in the county, and weight restrictions are posted when load becomes an issue.

The City of Montour has two bridges that have been closed in the city, creating an issue for residents in the northwestern part of the city. The city is attempting to place the Jacob Street bridge on the city bridge fund list, but it remains unknown how the community might fund bridge repair or replacement.

A typical flooding problem spot in Tama County is V18 through Chelsea, which is typically under water along with the city. Highway 63 South of Tama is also a problem.



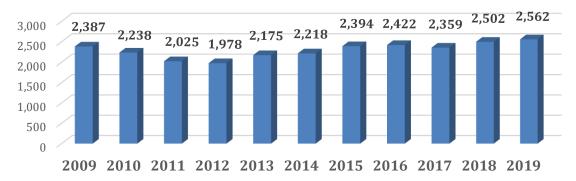
Photo Source: Region 6 Resource Partners, 2010

## **Traffic Safety**

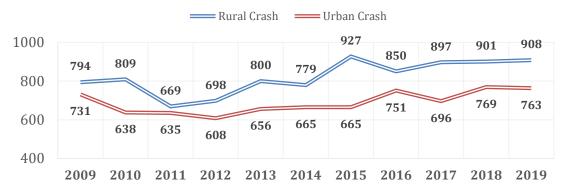
Crashes in the region are widely distributed with concentrations around population centers and along routes with high average traffic. According to the Iowa Crash Analysis Tool (ICAT), from 2009 to 2019, there have been 16,609 reported crashes within the four-county region. 154 of those crashes involved a fatality, resulting in 175 total fatalities. Over the past five years, an average of 16 fatalities have occurred annually on a regional road.

#### Total crashes from 2009-2020: 16,609

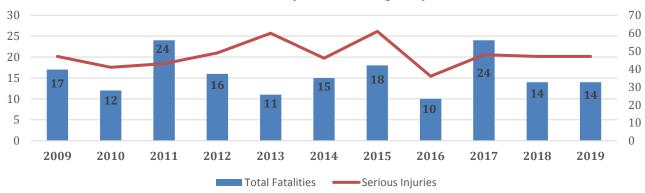
Number of Vehicles Involved in Crashes in the Region by Year Average number of vehicles involves in a crash per year: 2,296



## Crashes Per Year Classified by Rural or Urban



Crash Fatalities and Injuries in the Region by Year



## Iowa Strategic Highway Safety Plan (SHSP)

As part of the Iowa DOT'S statewide Strategic Highway Safety Plan (SHSP), a safety emphasis area analysis was performed using crash data from 2013 – 2017. Each crash that occurred in Iowa is attributed to one or several "emphasis areas," such as lane departures or older drivers, depending on the nature of the crash. The aggregate of this data is able to prioritize and develop strategies that might reduce fatal and serious injury crashes. There are 18 "safety emphasis areas" that were used for Iowa's analysis. In the RPA-6 region, the highest ranked safety areas are below.

The percentage listed below is the percentage of accidents in the region that were attributed to each safety emphasis area.

Top 4 Highest Ranked Safety Emphasis Areas for RPA 6

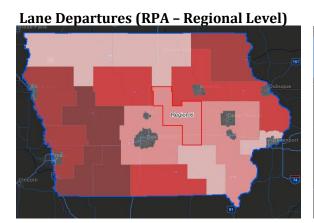


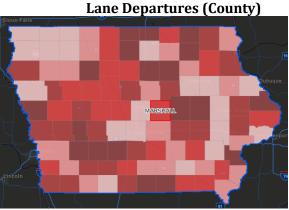
The above rankings represent the most common factors involved in an accident. Below and on the following page further illustrates these factors with a comparison between RPA-6 versus other regions as well as comparisons at the county level.

Highest 20%

The color shading of the boundaries indicate how high each region or county is ranked for that particular safety emphasis area. The darker the color, the higher it is ranked, meaning the higher the percentage of accidents involving that safety emphasis area.

Safety Emphasis Area Comparisons by Region and County

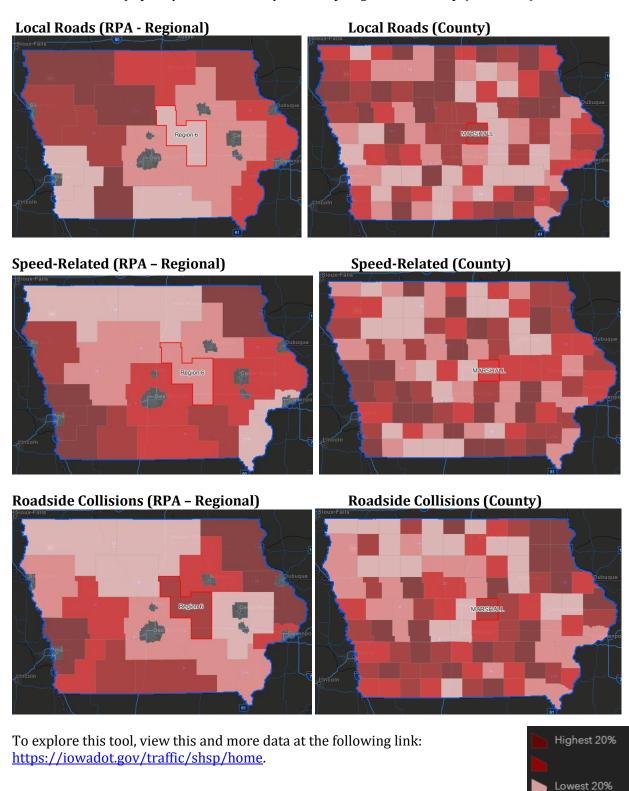




Lowest 20%

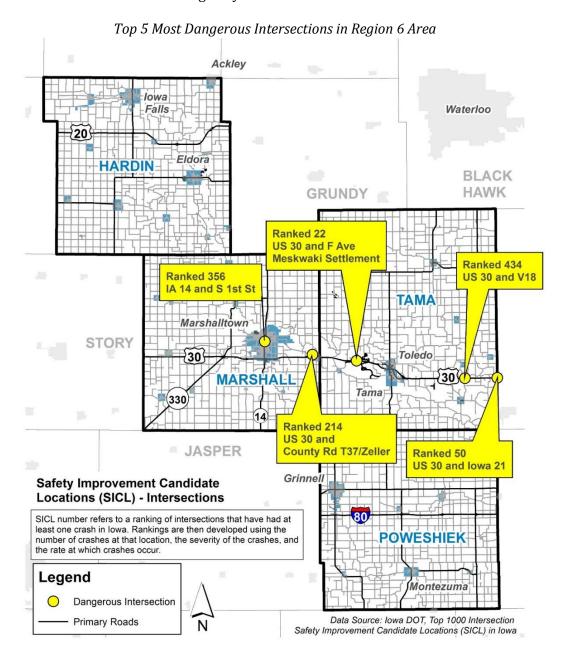
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Safety Emphasis Area Comparisons by Region and County (continued)



The Iowa DOT develops a list of the top 1,000 safety improvement candidate locations (SICL) in Iowa. To develop the list, crash data in Iowa is used to identify intersections where at least one crash has occurred. The intersections are then ranked according to the number, severity, and frequency of crashes at that location. From this data, the top five "most dangerous" intersections in the region have been identified:

- Ranked #22 in state: US Highway 30 and F Avenue (Meskwaki Settlement)
- Ranked #50 in state: US Highway 30 and Iowa Highway 21
- Ranked #214 in state: US Highway 30 and County Road T37/Zeller
- **Ranked #356 in state:** Iowa Highway 14 and S 1st Ave (Marshalltown)
- Ranked #434 in state: US Highway 30 and V18



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There are some planned safety improvements to the intersections on the previous pages:

- Ranked #50 in state: This intersection will have improved controlled access. This project is tied to Highway 30 construction in the area with construction being at least two to three years out. Other safety measures may be able to be considered in future US Highway 30 improvements.
- **Ranked #356 in state:** Iowa Highway 14 and S 1st Ave (Marshalltown).
- **Ranked #434 in state:** This intersection has been somewhat improved with the current Highway 30 project. The geometry and sight distances have improved. There is also a large median where crossing vehicles only need to be concerned about monitoring one direction of traffic at a time.

## **Pedestrian and Bicycle Safety**

Both pedestrian and bicycle safety are a concern in the region, particularly with regard to motor vehicle traffic. There are some areas without sidewalks where pedestrians walk on the street frequently, which is a definite safety concern, especially during inclement weather. Sharing the roadway can be frustrating for motorists due to perceived unpredictability of bicyclists—not following traffic laws is often cited—while bicyclists can be frustrated with unaware motorists or aggressive behavior.

In the last five years (2015-2019), there were 55 total pedestrian-involved crashes in the region, which resulted in 6 fatalities and 8 serious injuries. These crashes occurred in a variety of locations including smaller towns (Radcliffe, St. Anthony, Eldora), rural locations in the county, and larger communities (Grinnell, Iowa Falls, State Center, Traer, and Toledo). Pedestrian-involve crashes involving fatalities or serious injuries are listed below. More information about crashes can be explored at the Iowa DOT's interactive Crash Analysis Tool at https://icat.iowadot.gov/.

Marshalltown experienced the largest share of pedestrian involved crashes in the region in the last five years (2015-2019) with 35 of the total 55 accidents in the region -64%.

Pedestrian-Involved Crashes Involving a Fatal Injury in Region 2015-2019

Year	City	Location of Crash
2015	Iowa Falls	North edge of town on US 65
2016	Rural Hardin County	00 Avenue southeast of Iowa Falls
2017	Rural Tama County	Intersection of Trading Post Rd and US 30 Eastbound
2017	Grinnell	400 Block of 6th Avenue
2017	Marshalltown	Intersection of Iowa Avenue West and South 12th
2019	Marshalltown	Intersection of West Main and South 13th

Source: Iowa Crash Analysis Tool <a href="https://icat.iowadot.gov/">https://icat.iowadot.gov/</a>

Pedestrian-Involved Crashes Involving a Serious Injury in Region 2015-2019

Year	City	Location of Crash
2014	Marshalltown	South 14 <sup>th</sup>
2016	Marshalltown	Intersection of South Center and West Olive
2017	Rural Poweshiek County	20th Street north of Grinnell
2017	Rural Poweshiek County	V 18 south of Brooklyn
2017	Marshalltown	Intersection of South Center and Lafrentz Lane
2017	Iowa Falls	Intersection of US 65 and Pierce Street
2019	Marshalltown	Intersection of South Center and Merle Hibbs
2019	Eldora	Intersection of 11th Avenue and 14th Street

Source: Iowa Crash Analysis Tool https://icat.iowadot.gov/

"I would like to see safe bike routes that allow [bikers] to travel away from cars (not bike lanes next to cars). Cars and bikes don't mix well, even when everyone is trying to be safe.

Just biking around and through Grinnell can be problematic along busy streets."

-Poweshiek County Survey Respondent

Pedestrian-Involved Crashes in Marshalltown 2015-2019



Pedestrian-involved crashes in red above. Source: Iowa Crash Analysis Tool <a href="https://icat.iowadot.gov/">https://icat.iowadot.gov/</a>

In a five-year period from 2015-2019, 35 total pedestrian-involved crashes occurred in Marshalltown. To give this number context, five other cities in Iowa with similar populations

(between 24,556 and 27,457 were analyzed using the same Iowa Crash Analysis data set during the same five-year period. The number of pedestrian-involved crashes in Marshalltown were slightly higher at 35 compared to an average of 28.

City	Population	Ped-Involved	Fatalities	Serious Injuries
	(2017 ACS)	Crashes		
Fort Dodge	24,556	29	0	3
Ottumwa	24,705	20	0	4
Burlington	25,330	29	0	1
Clinton	25,892	25	1	5
Marshalltown	27,440	35	2	4
Mason City	27,457	30	2	3
AVERAGE		28	.83	3.3

Source: Iowa Crash Analysis Tool https://icat.iowadot.gov/

As seen from the map above, the location of pedestrian-involved accidents in Marshalltown is relatively spread out, although several accidents occurred along Main Street and along Central Avenue/State Highway 14. The City of Marshalltown has recently completed plans for the Highway 14 corridor and for downtown Marshalltown. The city plans to implement recommended streetscaping, roadway, and multi-modal transportation initiatives in the coming years that will address several of the locations of pedestrian-involved crashes. Marshalltown is also partnering with a local arts organization, the Marshall County Arts and Culture Organization, to create murals outside of three elementary schools saying "look both ways" near school cross areas.

## **Non-Motorized Transportation**

Many additions and improvements have been made to the recreational trail system in Region 6 including both trail and bicycle lane projects. Thanks to local dedication and funding sources including the State Recreational Trails Program, Federal Recreational Trails Program, and the Transportation Alternatives Program (TAP), the region continues to make progress in building a network of regional multi-use trails.

The region hosts several trails that are part of the statewide trail network. When completed, the American Discovery Trail (ADT) will traverse 500 miles across Iowa using a number of existing shared use paths in the state. In the planning region, the ADT will follow the Heart of Iowa Nature Trail (Marshall County), the Linn Creek Greenbelt (Marshall County) and the Wolf Creek Trail (Tama County connecting to Comet Trail in Grundy County) in the region. The American Discovery Trail is a nationally significant, coast-to-coast, non-motorized recreational trail that, once completed, will stretch across more than 6,800 miles and 15 states.

### American Discovery Trail in Iowa



Source: https://discoverytrail.org/states/iowa/

The Central Iowa loop trail connects five existing shared use paths to form a 100+ mile trail network. The network includes the Heart of Iowa Nature Trail (Marshall County).



Source: https://iowadot.gov/iowabikes/Iowa-Trails/Trails-of-statewide-significance

A full listing of trails in the region by county is on the following pages.

## **Hardin County Trails**

- *Hubbard Trail* Granular 1.6 mile trail running out of Hubbard and to the west.
- *Iowa River's Edge Trail* Planned 34-mile trail that will connect Hardin County (as far north as Steamboat Rock) and Marshall County (ending in Marshalltown).
- *Pine Lake State Park Trail* 2.6 mile concrete trail running from Iowa 175 in Eldora to Steamboat Rock State Park.
- **Rock Run Creek Trail** Paved concrete 1 mile trail running from the southern part of Iowa Falls near Wal Mart up to the Iowa River and through the local Rock Run Park.

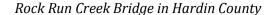




Photo Source: Hardin County Trail Committee, 2012

Pine Lake Recreational Trail in Hardin County



Photo Source: Alltrails.com 2020

## **Marshall County Trails**

- *Heart of Iowa Nature Trail* 3.6 mile granular trail running from the Story/Marshall County line to Rhodes. Part of the future American Discovery Trail.
- *Iowa 330 Trail* 7.7 mile asphalt trail that begins on the east side of Iowa-330 just west of Melbourne to Starry Grove Rd (south just of Highway 30). Part of the future American Discovery Trail.
- *Iowa River's Edge Trail* Planned 34-mile trail that will connect Hardin County (as far north as Steamboat Rock) and Marshall County (ending in Marshalltown).
- Linn Creek Greenbelt Parkway Paved asphalt 8.5 mile trail. Part of the future American Discovery Trail.
- Linn Creek Highway 30 Trail Paved concrete 3 mile trail.

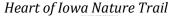




Photo Source: www.traillink.com 2020

Iowa River's Edge Trail in Marshalltown



Photo Source: Region 6 Resource Partners, 2020

# **Poweshiek County Trails**

- *Grinnell Trail* Paved concrete 1.3 mile trail in Grinnell running from Industrial St to Washington St.
- **Rock Creek Trail** Paved asphalt 5.7 mile trail running from Rock Creek State Park to the Poweshiek/Jasper County line in Grinnell
- **Stagecoach Trail at Diamond Lake County Park** Paved concrete trail in Montezuma running .5 miles from Hayes St to Diamond Lake and then .8 miles from Diamond Lake to F46.

Stagecoach Trail at Diamond Lake County Park



Photo Credit Poweshiek County Conservation 2019

Stagecoach Trail at Diamond Lake County Park



# **Tama County Trails**

- *Old Creamery Trail* 1 mile asphalt trail near Dysart. Connects with another 14 miles of the Old Creamery Trail in Benton County.
- *Tama Toledo Recreation Trail* Granular 2.5 mile trail running north/south through Tama and Toledo.
- **Wolf Creek Trail** Asphalt 1.7 mile trail. Connects with Comet trail in Grundy County, which is part of the American Discovery Trail network.



Photo Source: Old Creamery Trail Facebook Page 2020



Photo Source: Traillink.com Accessed 2020

#### **Trail Priorities**

Overall, achieving connectivity of local trail projects to local, state, and national trail systems is critical to the recreation, economy, and transportation goals of Region 6 and Iowa. These facilities have the potential to bring people from all over the nation to hike and bike for an afternoon or for a cross-country adventure, adding an economic element in tourism dollars for the area as well as generating interest for new residents and new businesses.

A 2012 study completed by the University of Northern Iowa estimates that bicycling generates over \$350 million in direct and indirect economic impacts in Iowa. The study also estimated that bicycling saves Iowa over \$70 million in healthcare costs, which is a substantial and added benefit (Iowa Bicycle Coalition, 2012).

In the past several years, trail projects have become difficult to fund due to budget constraints and limited fund sizes for existing grant opportunities. Despite funding challenges, there is substantial local support from groups of community officials and residents in the planning region for trails projects. See Appendix D for a map of trails in the region as well as the Iowa River's Edge Trail's progress.

#### Several upcoming trail projects in the region include:

- Complete trailheads along the Iowa River's Edge Trail system where the trail is completed.
- Complete the Iowa River's Edge Trail from "Radio Tower Road" located just northwest of Marshalltown city limits to Albion. This phase of the trail will be a multi-million project involving the replacement of seven non-operational, aging, wooden railroad bridges and paving of the trail surface once bridge replacement is completed. Millions of dollars still need to be raised to complete this trail gap.
- Extend the Iowa River's Edge Trail from Steamboat Rock to Eldora. The cost of this extension is \$1.7 million. This trail gap is funded. Construction will likely take place in 2022.
- Complete Iowa River's Edge Trail from Highway 175 in Eldora south towards the unincorporated village of Gifford.
- Complete the Iowa River's Edge Trail within Albion.
- Complete bridge rehabilitation or replacements and trail paving between Gifford and Albion
- Extend the Linn Creek Recreational Trail system within Marshalltown to destinations like Sand Lake and the American Legion Golf Course.
- Continue the Grinnell Area Recreational Trail from Industrial Avenue (near Wal-Mart) to 420th Avenue (Grinnell Mutual). This project will need to be done in 2 or more phases. This project will run along the East side of Iowa Highway 146 and will need to be done in 2 or more phases. The project cost is under \$1 million and is partially funded.
- Complete gaps in the Iowa Falls Recreational Trail near River Bend Middle School.
- Pave sections of the South Tama Recreational Trail within Tama-Toledo.
- Sidewalk improvements, especially safe routes to school efforts, in places that have strong need and local support. Possible opportunities include South Tama Schools and Tama/Toledo.
- Support of project that develop regional trail connectors that contribute to the American Discovery Trail in Iowa

## **Sidewalk Connectivity and Condition**

Pedestrian facilities are also a concern in the Region 6 planning area—primarily system connectivity and condition. In many cities, there are gaps in the sidewalk system, major deterioration, cracks and uplifting that adversely affect pedestrian safety, or no sidewalks at all. Many cities have existing sidewalk ordinances in place, but few enforce them. In all cities, it is anticipated that if property owners were required to make improvements or add sidewalks to their property, there would be major opposition and potentially financial hardship for many property owners. Several municipalities are beginning to prioritize sidewalk infrastructure as a local need with varying plans in place to enforce sidewalk ordinances and to fund sidewalk replacement.





Privately owned sidewalk segments in need of repair in a town of around 2,500 population in RPA 6 region.



A well-worn pedestrian path next to a main road that goes through the small community of Steamboat Rock in Hardin County. Pedestrians use this path to travel to the nearby playground, community gathering spots in the old school building, and use it as a general east/west thoroughfare through town.

#### **Public Transit**

#### **Peoplerides**

Public transit in the RPA 6 region is provided by Region 6 Resource Partners. The system operates on a demand response basis and provides approximately 49,000 rides per year. There are currently 23 vehicles in the fleet. All of the vehicles fully comply with all Americans with Disabilities Act standards and are fitted with either lifts or ramps to assist persons with disabilities. Region 6 has one full time transit manager, one assistant manager and one full time scheduler/dispatcher. They employ 7 full time drivers and 10 part time drivers. Peoplerides hours of service are 7:30 AM to 4:30 PM Monday thru Friday.

Peoplerides helps people of all ages and abilities get to services, medical appointments, work, shopping and other essential functions. Many Peoplerides users do not have other means of transportation, making Peoplerides a key part of maintaining individual quality of life and independence.



Photo from July 2011

#### Other Providers of Public Transit in the Region

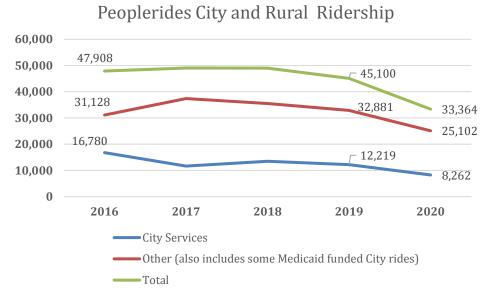
Passenger transportation for the general public in the City of Marshalltown is provided by Marshalltown Municipal Transit (MMT). Marshalltown has the only small urban transit system operating within the Region. Hours of service are 7:20 a.m. to 6:00 p.m., Monday through Friday. Service generally includes two buses operating on four routes with 30 minute headways. The City offers complementary paratransit service with the same hours for disabled people. Express bus routes are offered at peak times, which primarily assist the K-12 schools.

MMT does not provide service on weekends or on seven observed holidays. The MMT fixed route is accessible to persons with disabilities. MMT buses are able to provide a total of 19 wheelchair spaces, depending on the configuration of passenger seat to wheelchair ratio. Operating hours for paratransit service for disabled people in Marshalltown correspond with those of MMT.

#### **Peoplerides Regional Transit Trends**

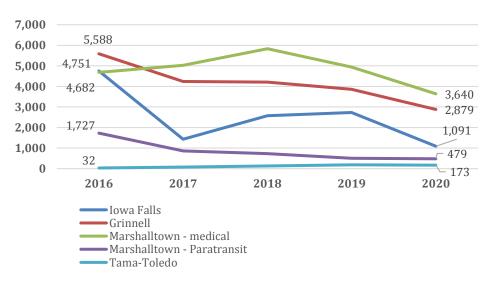
#### **Ridership Trends**

The average Peoplerides ridership from 2016 to 2019 was 47,762. 2019 ridership was about 6% less than that average. The regional transit ridership has remained very similar to the average since the late 1980s. Ridership data from 2020 is incomplete at this time, but in general, ridership is significantly down due to the COVID-19 pandemic. For several months in 2020, operations were limited to essential trips, and some partner facilities were locked down to prevent the spread of COVID-19 among vulnerable populations.



Ridership from Peoplerides City Rides (rides that both originate and end in same city) decreased about 27% from 2016-2019. Some of this decrease is due to the fact that Medicaid now funds many City Rides, so those rides are included in the Medicaid ride categories (not shown in the graph below).



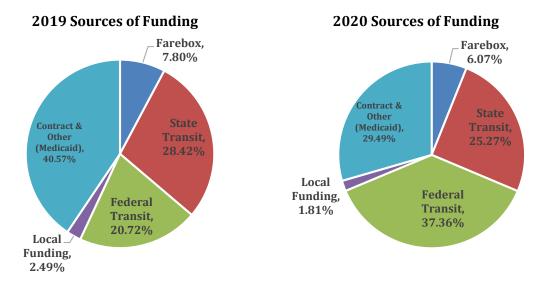


## **Peoplerides Sources of Funding**

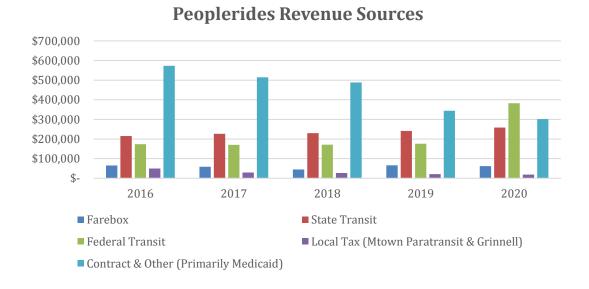
The operating costs of Peoplerides are funded through several sources:

- Passenger fares
- State and Federal public transit funds
- Contract and other (primarily Medicaid)
- Local funding local contributions from some cities to subsidize specific types of rides

Below is a breakdown of Peoplerides sources of funding in 2019 and 2020.



Peoplerides revenue sources over time in actual dollar values are included below. Overall, Medicaid-funded rides have decreased over time. The increase in federal funding in 2020 is due to COVID-19 and the CARES Act.



#### **Peoplerides Operating Costs Over Time**

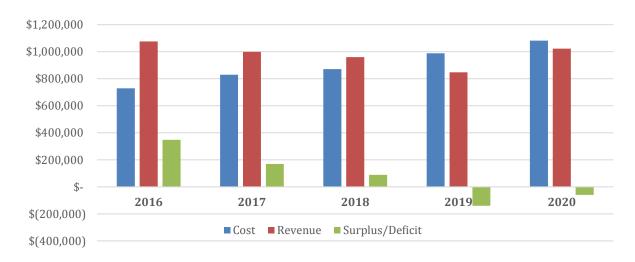
Poeplerides' operating costs increased about 36% from 2016 to 2019. Most of the increase is due to driver wage increases, shifting from part time to full time drivers because we cannot find part time drivers, health insurance costs, and vehicle maintenance costs.

Several trends have impacted Peoplerides sources of funding over time:

- Farebox revenue (passenger paid fees) remained consistent between 2015 and 2019 at an average of about \$59,000 per year.
- State Transit Assistance funding increased 20% over the 5 years.
- Local tax support (only for Marshalltown Paratransit and Grinnell services) decreased about \$31,000 over the 5 years. This revenue is based upon ridership.
- Federal transit operating funds have remained very consistent over time. The 2020 level was \$206,029 prior to CARES Act funding. This was up around \$33,000 over the previous 4year average.
- Contract and other revenues is critical to the regional transit program. A high percentage of that revenue is Medicaid. In 2016, that revenue was 53% of the operating funding. In 2019 that revenue decreased by 41%.

In 2019 the regional transit program lost \$140,000. Without the FTA CARES Act funding, the loss in 2020 would have been \$234,000. FTA CARES Act funding will help support operating costs through at least 6/30/21. The FTA Cares Act funding balance at 6/30/20 is \$386,158. Service hours were consistent over the time period. The average was 20,668 for the time period. Without the Pandemic we would have been close to that figure in 2020.

# **Peoplerides Costs and Revenues**



## **Regional Public Transit Challenges**

Rural areas have particular challenges when offering public transit for high mileage trips in low density areas. Rural areas are experiencing population decline, which limits potential ridership.

With areas having lower population density than an urban area, it also makes it challenging to provide affordable transportation options. Many drivers prefer other forms of transportation such as driving their own personal vehicle over public transit for ease of convenience.

In the RPA 6 service area, transit services in Iowa Falls, Grinnell, Tama-Toledo, and Marshalltown have been largely established to assist with frail elderly and disabled needs. Transit services in other rural areas of the region are designed to assist Medicaid consumers that are primarily disabled adults. Some services are available to assist frail elderly access medical appointments.

## **Regional Public Transit Needs**

Several transit needs in the RPA6 region are included below.

- More attractive rate structure for rural medical.
- Better funding needed for city services or an increased number of Medicaid funded trips in rural places for people that reside in homes. Since the number of rural Medicaid trips or consumers has not changed significantly since the late 1980s, City funding for transit operations may need to increase.
- For both of these problems some regional systems rely upon a per capita fee assessment that is paid by counties. However, this fee is not typically used for City demand response services.
- Help with employment transportation. JBS, Iowa Premium, and maybe others would benefit from employee shuttles. All are struggling to find and retain workers. Would require a partnership with these employers.
- Better student services for Grinnell College. After hours, weekend, and maybe some daytime hours. Would require some partnership program with Grinnell College and/or the students.
- Greater awareness and marketing of services.

# **Emergency Response Planning**

Region 6 has experienced anomalous high-impact, low-probability events during the past five years. It has proven that communities, including transportation networks must be prepared for inconceivable situations. Transportation can drastically influence a community's response and recovery from natural disasters, hazards, and the economic impact of these events.

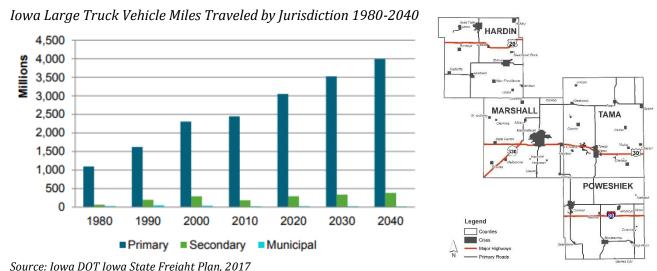
Region 6 will work throughout the National Incident Management System (NIMS), developed by the Department of Homeland Security, to follow a standardized approach to incident management and response which will improve preparation, coordination, and incident management in the event of a crisis.

Region 6 will analyze disaster probability, network vulnerability, roadway capacity, and economic resilience throughout the region to determine transportation strengths, weakness, and needs in the event of a crisis. Region 6 will coordinate with communities and partner agencies to develop a regional emergency preparedness plan which will include a hazard mitigation plan, evacuation plan, and pandemic plan. Primary focuses of transportation emergency planning will include public transit evacuation and primary artery obstruction.

# **Freight Transportation**

# Trucking

The majority of freight traveling in, out and around Iowa is moved by truck and rail. Trucks continue to be the dominant way that freight is transported in the state. The figure below shows the growth in large truck travel over the last 40 years and projecting 20 years out. Primary highways include interstates, US routes, and Iowa rites. Secondary roads include county routes. Iowa's Interstate highways carried 62% of the state's large truck traffic (combination units in 2015).



https://iowadot.gov/iowainmotion/files/Iowa-State-Freight-Plan-Update-2018.pdf

If recent trends continue, large truck traffic will increase approximately 66% by 2040 (Iowa DOT State Freight Plan 2017). The desire to increase truck size and weight in order to decrease overall transportation costs is pushing load weights higher. This increase in truck traffic will take a toll on road condition and road replacement schedules.

The RPA 6 region is affected by primary truck traffic on the following primary roads:

- Interstate I-80
- US Highway 20
- US Highway 30
- State Highway 330
- State Highway 14



A large semi-truck shipment is escorted by the Marshall County Sheriff's Department on Iowa State Highway 14.

Semi-truck freight affords greater access since businesses do not need to be located near a rail line to ship or receive goods. Semi-trucks are also more convenient for short distance hauling, especially during the harvest season. Semi-truck freight is especially important in communities that are no longer served by rail lines. Traveling through Region 6 and Iowa, the growth in the semi-truck freight industry is evident. Throughout Iowa, several community colleges have developed semi-truck driving certification programs because drivers are in high demand.

#### **Freight Bottlenecks**

According to <u>Iowa DOT Open Data</u>, there is only one highway freight bottleneck in the Region 6 area that were identified in the 2016 Iowa State Freight Plan. This area was at Highway 14 north or Marshalltown up to the intersection of Highway Iowa-330.

# **Interstate and Intrastate Commodity Shipment**

Key industry commodities that use the freight system in Iowa for *interstate* shipment – shipment of items in and out of Iowa – include cereal grains, gravel, animal feed, and coal. Cereal grains, including corning, oats, and wheat, make up 101 million tons of product shipped originating from Iowa and 97.1 million tons terminating in Iowa per year. This is the largest tonnage of any commodity either originating or terminating in Iowa, representing \$21 billion in both originating and terminating shipped product.

Communities being moved within Iowa – or *intrastate* shipments – also have a large impact on the state's freight transportation system. For commodities that both originate and terminate within Iowa, cereal grains account for 80.5 million tons, representing \$17 billion in goods and 33% of the total tonnage of intrastate good shipment.

Top Commodities Moving Within Iowa 2012 – Intrastate Shipments by Tonnage

Commodity	Millions of tons
Cereal grains	80.5
Gravel	47.7
Animal feed	29.1
Other ag products	18.9
Nonmetal mineral products	14.2
Other foodstuffs	6.5
All other	46.2
Total	243.2

Source Iowa State DOT Freight Plan 2017

#### Rail

Aside from truck shipping, rail lines are a major freight carrier in Region 6 and Iowa. There are several different types of rail line that are operated throughout Iowa and the nation – Class I, Class II, and Class III. Railroad classes are determined by operating revenue of each company, with Class I operators having the highest revenue. Class I railroads had a minimum carrier operating revenue of \$433 million per year in 2011.

The region is currently supported by four railroad companies:

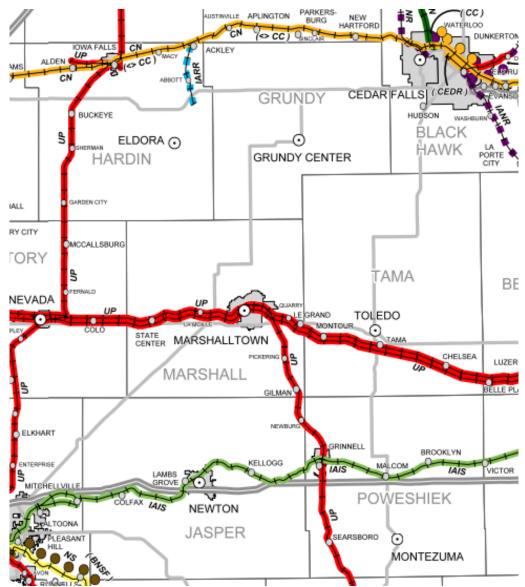
- Union Pacific (Class I)
- Canadian National (Class I)
- Iowa Interstate (Class II), and
- the Iowa River Railroad (Class III)

## Railroad Service Providers in the Region

Company	Cities Served	Carrier Code	Class
	Marshalltown, Le Grand, Montour, Tama,		
Union Pacific	Chelsea, Iowa Falls, Grinnell, Searsboro,	UP	I
	Buckeye, Gilman		
Canadian National	Iowa Falls, Alden, Ackley	CN	I
Iowa Interstate	Brooklyn, Malcom, Grinnell	IAIS	II
Iowa River Railroad	Ackley	IARR	III

Source: Iowa State Freight Plan 2017

#### Railroad Service Map for RPA 6 Region



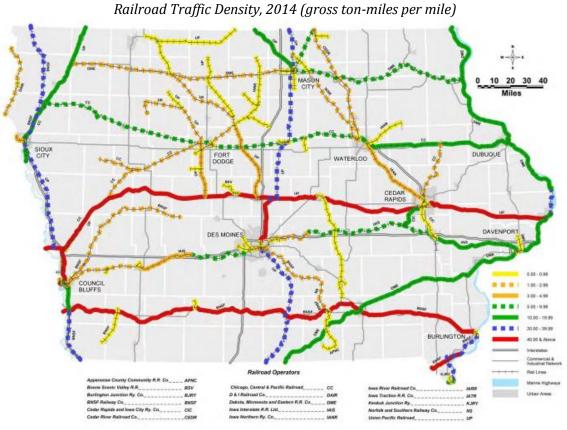
Source: Iowa DOT Railroad Service Map, Prepared July 1 2018

Until recently, the Iowa River Railroad operated freight service from Marshalltown, Iowa to Ackley, Iowa, for a distance of 41.89 miles. In 2012, the Iowa River Railroad filed to abandon the line running from Steamboat Rock to Marshalltown. This rail line was rail banked from Marshalltown to about Highway 20 as a recreational trail by the Iowa Natural Heritage Foundation. The rail bank length is about 34 miles. There will continue to be rail service from just South of Highway 20 to Ackley where the line interconnects with the Canadian National.

For the purposes of developing the 34 mile "Iowa River's Edge" recreational trail, the City of Marshalltown has agreed to own the section of the former Iowa River Railroad segment in Marshall County. The city has an agreement with Trails, Inc. a non-profit corporation, to provide trail maintenance. Engaged citizens have formed a non-profit in Hardin County, Hardin County Trails Committee, to further the development of the Iowa River's Edge trail in the county. This group is

working closely with Hardin County and other trail partners to develop and maintain the Iowa River's Edge Trail in Hardin County.

As seen from the map below, the Union Pacific line that runs roughly through the center of the state from east to west has dense railroad traffic with 40 gross ton-miles per mile and above (red). Gross ton-miles is commonly used in rail transportation to measure the total weight of product and distance that the product is moved to determine rail "density" of use. Gross ton-miles are calculated by multiplying the total weight of loaded and empty freight cars by the number of miles moved by a train



Data Source: Iowa State Freight Plan 2017 <a href="https://iowadot.gov/iowainmotion/files/Iowa-State-Freight-Plan-Update-2018.pdf">https://iowadot.gov/iowainmotion/files/Iowa-State-Freight-Plan-Update-2018.pdf</a>

Regional challenges related to the freight rail system include:

- The Union Pacific line near Montour, Iowa is a flood-prone area and was closed in 2014 due to a large rain event. This issue was identified in the 2017 Iowa State Freight Plan.
- Railroad noise continues to have a negative impact on downtown Marshalltown quality of life and has also been cited as an issue for the future development of new downtown housing and lodging. The Marshalltown 2018 Downtown Plan Update recommended implementation of the recommendations of a quiet zone study to reduce freight train noise from South 12th Street to South 12th Avenue.
- A major rail line improvement project in the region is being considered in Iowa Falls. The project involves constructing trunk lines to connect the existing Canadian National and Union Pacific Railroad lines outside of Iowa Falls to serve the Iowa Falls Business Park. In addition, mega site certification is being pursued in order to attract large businesses.
- Safety, primarily derailment and hazardous materials, and noise are primary concerns.
- At-grade rail line crossings are a concern in most Region 6 counties and cities that are served by freight rail line. It is the responsibility of the counties and cities to work with the rail line operator to minimize potential conflicts, but feedback indicates this is a frustrating and often futile process.

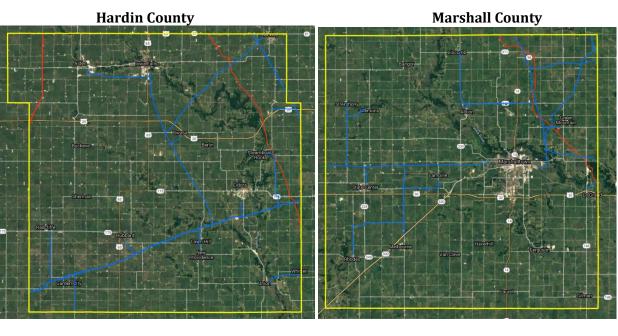
RPA 6 At-Grade Railway Crossings – Intersection of Railway and Public Road

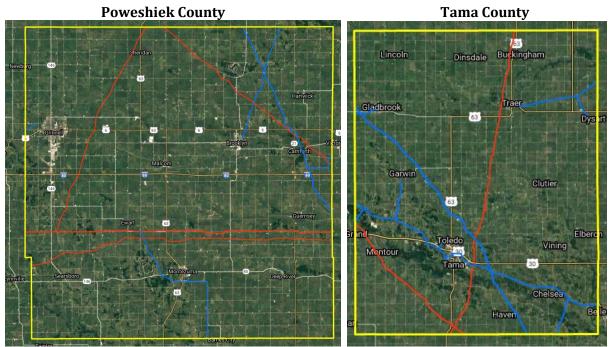
County	City	Number of Crossings In/Near
	Ackley	3/5
	Alden	2/8
Handin	Buckeye	2/8
Hardin	Garden City	0/8
Total Crossings: -	Iowa Falls	15/9
70	Radcliffe	0/3
	Steamboat Rock	1/3
	Williams	0/2
Massalsall	Gilman	0/10
Marshall	Le Grand	0/1
Total Crossings: -	Marshalltown	14/9
41	State Center	4/3
	Brooklyn	2/4
Poweshiek	Grinnell	23/12
Total Crossings:	Malcom	2/5
59	New Sharon	1/2
	Searsboro	2/5
	Victor	0/3
Tama	Chelsea	2/2
Total Crossings:	Montour	2/2
19	Tama	2/10

Data Source: US Federal Railroad Administration Crossing Inventory Dashboard <a href="https://railroads.dot.gov/crossing-and-inventory-data/grade-crossing-inventory/crossing-inventory-data/grade-crossing-inventory/crossing-inventory-data/grade-crossing-crossing

# **Pipelines**

Pipelines are considered critical infrastructure for the transportation of liquid and gaseous freight. A network of pipelines exists through all four counties in the region. Below, blue lines represent the approximate locations of Gas Transmission Lines, while red lines represent approximate locations of Hazardous Liquid Pipelines. To view these maps, visit the National Pipeline Mapping System (NPMS) Public Viewer at <a href="https://pvnpms.phmsa.dot.gov/PublicViewer/">https://pvnpms.phmsa.dot.gov/PublicViewer/</a>.





Source: US DOT National Pipeline Mapping System (NPMS) Public Viewer https://pvnpms.phmsa.dot.gov/PublicViewer/

# **Airports**

Air travel is an important part of Iowa's transportation system. Airports serve as access points for both people and goods. In a global economy, airports are critical to the development of future markets. For people traveling, general aviation airports provide important access to the national transportation system.

Region 6 currently has five publicly-owned airports located in Marshalltown, Iowa Falls, Grinnell, Traer, and Toledo. A privately owned public use airport located in Ackley.

**RPA 6 Airport Information** 

Location	Airport Name	Aircraft Operations	Aircraft Based on Field	% Local General Aviation	Runway Surface and Length	Ownership
Ackley	Ackley Municipal Airport	38/month	4		Turf 2,725 ft	Privately owned public use*
Grinnell	Grinnell Regional Airport	114/week	16	60%	Concrete Grooved 5,200 ft	Publicly owned public use
Iowa Falls	Iowa Falls Municipal Airport	109/week	12	65%	Asphalt 4,001 ft	Publicly owned public use
Marshalltown	Marshalltown Municipal Airport	37/day	36	41%	Asphalt 5,006 ft	Publicly owned public use
Toledo	Toledo Municipal Airport	82/month	4	65%	Turf 1,850 ft	Publicly owned public use
Traer	Traer Municipal Airport	43/week	8	51%	Turf 2,555 ft	Publicly owned public use

Source: AirNav, LLC, 2020 http://www.airnav.com/airports/us/IA and Iowa Aviation System Plan 2010-2030 https://iowadot.gov/aviation/studiesreports/technicalreport/6%20-%20Chapter%203.pdf

There are no airports with commercial airline service located in the Region 6 area. The nearest commercial airports are in Cedar Rapids, Waterloo, or Des Moines. A map of commercial airports in Iowa is on the following page.

Several airports in the region have undergone improvements in recent years. These include:

- **Marshalltown Municipal Airport**. Hangar floor replacement in 2015 and 2017, rehabilitation of runway end 18 and connecting taxiways in 2017, and a new hangar and terminal that started construction in fall of 2020. (Source: <u>CGA</u>)
- **Grinnell Regional Airport.** Runway evaluation and rehabilitation design in 2016, fuel system improvements in 2017-2018, construction of conventional hangar and taxi lane in 2018 and runway reconstruction in 2018-2019. (Source: <u>CGA</u>)

<sup>\*</sup>This airport is privately owned but meets the state minimum safety standards required to be open for public use. All airport open for public use are inspected regularly and must obtain an annual certificate issues by the lowa DOT Office of Aviation. Privately owned-public use airports are not eligible for federal or state funding.

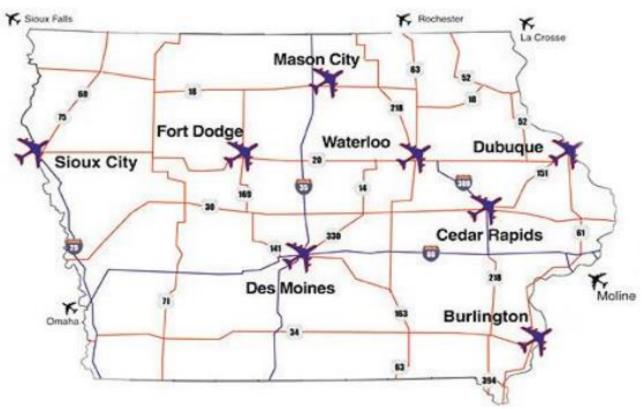
• **Iowa Falls Municipal Airport.** Parallel taxiway construction in 2017 as a safety improvement (Source: Times Citizen).

Rendering of New Hangar and Terminal for Marshalltown Municipal Airport with Construction Underway in Fall of 2020



Source Marshalltown Aviation Facebook Page

# **Commercial Airports in Iowa**



Source: Iowa DOT, 2019

## **Important Transportation System Considerations**

- ✓ A highway system connects Region 6 counties to each other and to the state of Iowa and beyond. U.S. Highways 65 and 63, and State Highways 14, 21, and 146 run north-south; U.S. Highway 20, State Highways 175, 6, and 30, and Interstate 80 all serve the Region from east to west.
- ✓ Interstate 80 provides average daily traffic to the region of nearly 30,000 vehicles per day, providing an efficient route for truck freight and vehicle traffic.
- ✓ The priority for counties and cities in the region is maintaining the current roadway system to ensure safe and efficient travel. The challenge in maintaining the existing road system is sufficient funding. Projects are being prioritized so that highly traveled routes or potential bottlenecks in the system have funding priority.
- ✓ Bridges are a major concern due to the large number with insufficient ratings and the high cost of replacement. Since Region 6 is primarily rural, maintenance issues include single-axle wagons, usually an agricultural implement, which places an extremely heavy point load on roads and bridges. Bridges are especially a challenge due to posted load limits increasingly being ignored by implement operators. Extra heavy semi-truck loads are also a maintenance issue in certain areas in the region.
- ✓ Natural hazards and their effect on travel in is another major issue in the region. Generally, any water crossing in the road system has the potential for flooding.
- ✓ Lane departures result in the highest percentage of accidents in the region. Dangerous intersections in the region include US Highway 30 and F Avenue (Meskwaki Settlement) and US Highway 30 and Iowa Highway 21 (Tama County).
- ✓ The recreational trail system continues to expand in the region. Using local trail segments, the American Discovery Trail will traverse 500 miles across Iowa. Local communities continue to develop new trails as community amenities. Overall, achieving connectivity of local trail projects to local, state, and national trail system is critical to the health, recreation, economy, and transportation goals of Region 6.
- ✓ Pedestrian facilities are also a concern in Region 6—primarily system connectivity and condition. In many cities, the condition of, or lack of, sidewalks adversely affects pedestrian safety.
- ✓ Public transit in the RPA 6 region is provided by Region 6 Resource Partners. The system operates on a demand response basis and provides approximately 49,000 rides per year.
- ✓ Freight rail, in partnership with the trucking industry, provides intermodal transportation that is critical to the economic health of Iowa. Aside from rail lines, semi-trucks are also a major freight carrier in Region 6.
- ✓ There are publicly-owned airports in Grinnell, Iowa Falls, Marshalltown, Toledo, and Traer. There is one privately-owned airport located in Ackley. Currently, there are no airports with commercial service located in the Region 6 area. Commercial service can be accessed a short drive away in Des Moines, Cedar Rapids, or Waterloo.

# CHAPTER 5: GEOGRAPHY, LAND USE, AND ENVIRONMENT

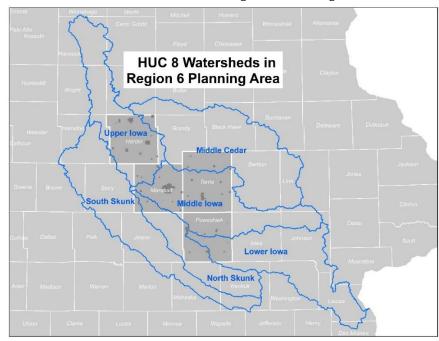
Planning for transportation projects must take into account both the potential impacts as well as the benefits of their implementation. This section examines the overall geography, land use and environmentally sensitive resources within the Region 6 planning area.

The geography of Region 6 is typified by rolling hills and plains, including some of the state's most productive farmland. The land use of the region is predominately agriculture or agriculture-related. Urban land accounts for only a small percentage of the land within the region.

## **Waterways and Water Bodies**

Region 6 contains numerous lakes, streams, and creeks that provide water for food production, drinking water sources and recreation. One of the most prominent water bodies is the Iowa River, which has been a significant cultural and economic resource. The Iowa River runs through, or near to, the communities of Alden, Iowa Falls, Steamboat Rock, Eldora, and Union in Hardin County; Liscomb, Albion, Marshalltown, and LeGrand in Marshall County; and Montour, Tama/Toledo, and Chelsea in Tama County.

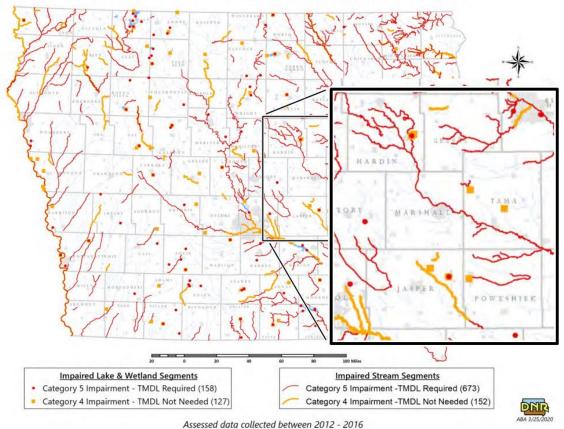
Much of the Region 6 planning area drains to the Iowa River watershed, including the Upper Iowa, Middle Iowa, and Lower Iowa sub-watersheds. A portion of northern Tama County drains to the Middle Cedar, and a portion of southern Poweshiek County drains to the North Skunk and South Skunk River sub-watersheds.



HUC 8 Watersheds in the Region 6 Planning Area

Source: Iowa DNR GIS database, 2019 Impaired Lakes and Streams

# 2018 CYCLE OF IOWA'S IMPAIRED SEGMENTS



Source: Iowa Department of Natural Resources

https://www.iowadnr.gov/environmental-protection/water-quality/water-monitoring/impaired-waters

The Iowa Department of Natural Resources (IDNR) maintains a list of impaired waters per US EPA requirements. Water bodies are classified as Category 1 through Category 5; Category 4 and 5 are considered "impaired." Category 5 impairment requires total maximum daily loads (TMDLs) to be calculated for that water body, and these water bodies are submitted to the EPA as the "Section 303(d) list of impaired waters."

#### Category 4 water bodies in the Region 6 planning area include:

- Lower Pine Lake (Hardin County)
- Union Grove Lake (Tama County)
- Otter Creek Lake (Tama County)
- Arbor Lake (Poweshiek County)

## Category 5 water bodies in the Region 6 planning area include:

- Tipton Creek (Hardin County)
- South Fork Iowa River (Hardin County)
- Beaver Creek (Hardin County)
- Upper Pine Lake (Hardin County)
- Iowa River (Hardin County, Marshall County, Tama County)
- Little Bear Creek (Poweshiek County)
- Wolf Creek (Tama County)

# **Floodplains**

The Iowa River floods on a regular basis, which affects transportation systems in Marshall and Tama Counties. Major flood events happen nearly every decade that affect traffic on the following major roads – Iowa 330, Iowa 14, US Highway 30, and US Highway 63. The Marshall County primary roads that are impacted by river flooding include East Main Street (E35), Garwin Road (E35), and sometimes S52 by Clemons. The Tama County primary roads that are impacted include V18 by Chelsea, E49 by the Meskwaki Settlement, and sometimes E66 by Chelsea. Other hard-surfaced primary roads may experience short-term flooding problems, but they are not as severe as the problems for the roads listed above. Overall, the granular roads along the floodplain areas experience more problems than the hard-surfaced roads. Over the last 30 years, the Iowa DOT has taken good mitigation steps to reduce closures on US Highway 30. Steps have included adding temporary barriers and installing high performance pumps during flood times to keep the road open.

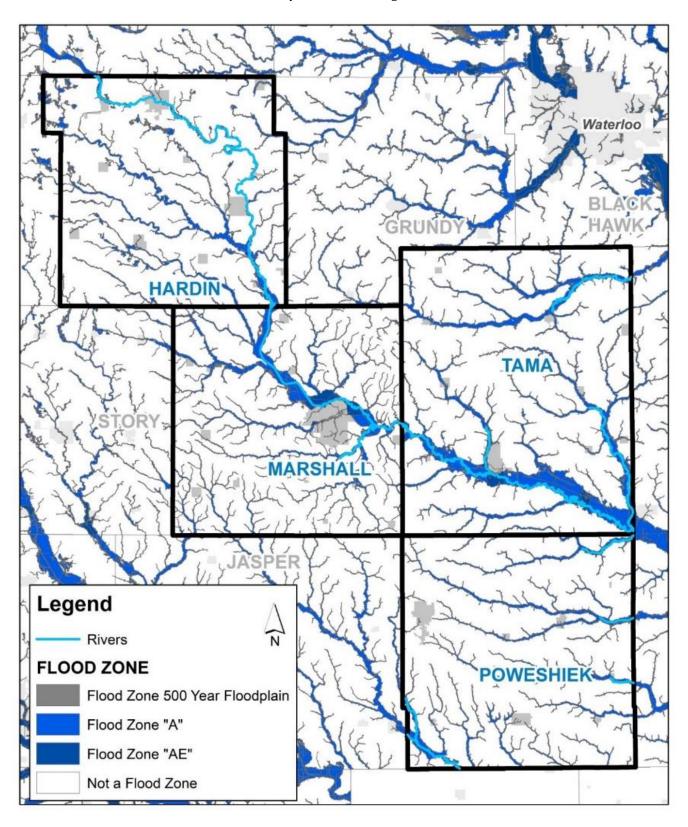
Some of the most challenging road closures in the region result flooding of the Iowa River and closure of Iowa Highway 14 north of Marshalltown. There are no evident mitigation measures to solve the problem. During the major flood events that happen roughly every decade, Iowa Highway 14 is closed for potentially a few weeks. Iowa Highway 14 north of Marshalltown is one of the first highways to close during an Iowa River flood event. Soon after, Iowa 330 near Albion closes. Then, a few days later East Main Road (east of Marshalltown) closes. These closures mean that traffic into Marshalltown coming from the north must rely upon alternative routes to get into the City, potentially for several weeks.

Limited access to Marshalltown for traffic coming from the north results in service disruptions for a major regional processor, JBS in Marshalltown. Much of the pork that this facility processes is trucked from Hardin County in the north to Marshalltown. When lengthy detours are in pace, these changes create higher transportation costs and disruption. The other challenge is emergency response in this part of the county. During these events, the homes in the area north of the Iowa River are isolated from emergency response services, which are largely based in Marshalltown. The closest major north/south road to use as a detour when Iowa 14 is closed is US Highway 65, which is more than 20 miles to the west. If an eastern detour is preferred when Iowa 14 is closed, travelers can use US Highway 63 north of Toledo, which is also over a 20 mile detour one-way.

One solution to this problem, which would likely be expensive, would include elevating one of the two lanes of Highway 14 going North of Marshalltown. Either East Main, Iowa 330 by Albion, or Highway 14 need to remain open. This solution would include building a low bridge structure from the Iowa River to some point 4,000-5,000 feet to the North. The cost of this bridge structure would be in the tens to hundreds of millions of dollars.

Iowa River flooding South of Tama along Highway 63 also causes some disruptions. When the road is flooded out, Iowa Highway 146 from Grinnell to LeGrand is a good alternate travel pathway. This is a 10-12 mile detour. There is lesser traffic and commerce into Tama from the South. Solving this problem would also require building a low bridge structure from the Iowa River to some point 3,000 to 5,000 feet South of the Iowa River. The cost of this mitigation is tens to hundreds of millions of dollars.

Flash flooding is a persistent issue in all Region 6 counties and cities, although each occurrence is typically short and only occurs during heavy rain events. Typically, flash flooding only incurs extra maintenance on gravel surfaces.



#### Wetlands

Wetland areas in the region are primarily concentrated in the riverine areas. The map below illustrates the role that the Iowa River plays on the location of wetlands in the planning region. Wetlands in this area are primarily riverine or freshwater emergent. The wetland areas that impact projects are in the areas prone to flooding that were previously discussed. The Region 6 area may benefit from natural flood mitigation and water quality improvement practices like what is being implemented in certain watersheds in Iowa with the Iowa Watershed Approach project. The region would certainly benefit from any flood mitigation strategies that could be implemented at a lower cost than building or replacing bridge structures. Long-term, systems thinking solutions are needed to keep some of the critical roads when flood events occur.

# **Riverine** 34% HARDIN Freshwater **Emergent** 34% **TAMA** MARSHALL Legend **WETLAND TYPE** Freshwater Emergent Wetland Freshwater Forested/Shrub Wetland **POWESHIEK** Freshwater Pond Lake Riverine

Wetlands in Planning Area

Source: US Fish and Wildlife Service http://www.fws.gov/wetlands/Data/State-Downloads.html

# **Protected Areas By County**

Protected areas are locations that are known to have environmental or cultural value. Numerous prehistoric Native American habitation and ceremonial sites have been found along or near the Iowa River to suggest that this part of the region has been an important economic resource since the last glacier retreated from the area. The region's rivers, streams, lakes and woodlands continue to serve as cultural and economic assets. The Iowa River Greenbelt in particular includes thick woodlands, steep valleys, and geological rock formations.

Natural resource areas in the region should be considered before any future transportation projects are planned and may require efforts to mitigate the environmental impacts of those projects. Any future transportation or economic development endeavors should take into consideration its effects on flooding, water quality of the Iowa River and other sub-watersheds and other natural resources.

Currently, there are a number of sites and thousands of acres of land within the Region that are maintained by County Conservation Boards. Interest is growing for the development of a regional comprehensive visioning and development plan for recreational facilities. Resources like the Iowa River's Edge Trail add an attractive recreational and natural resource corridor through two of the four counties in the region – Hardin and Marshall Counties. Securing funding for development of this amenity is a huge challenge. Having sufficient funding for maintenance is another large challenge. Since many trail systems across the state are struggling with maintenance funding, RPA 6 would recommend that the state have more dialogue about funding options for some of the larger trail systems, including trail maintenance funding. In some states, the state maintains some of the larger trail infrastructure.

## State Preserves and State Parks Located in Region 6 Planning Area

County	Туре	Name	Acres
Hardin	State Park	Pine Lake State Park	668
Hardin	State Preserve	Fallen Rock (Forest, Biological, Geological)	122
Hardin	State Preserve	Hardin City Woodland (Forest, Biological)	25
Hardin	State Preserve	Mann Wilderness Area (Forest, Biological, Geological)	103
Marshall	State Preserve	Marietta Sand Prairie (Prairie)	17
Poweshiek	State Preserve	Fleming Woods (Upland Oak Forest)	38
Tama	State Park	Union Grove State Park	300
Tama	State Preserve	Mericle Woods (Mature Oak Forest)	132
Tama	State Preserve	Casey's Paha (Geological)	175

Source: Iowa Department of Natural Resources Preserve Guide, 2020 <u>https://www.iowadnr.gov/Places-to-Go/State-Preserves</u>

# **Region 6 County Conservation Board Recreational Areas**

County	No. of Sites	Acres of Land	Acres of Water	No. of Lakes	No. of Streams
Hardin	44	3083.6	8	1	28
Marshall	25	1349	23	1	7
Poweshiek	12	1401	98	1	3
Tama	11	653	66	2	6
Region Total	92	6486.6	195	6	44

Source: Iowa's County Conservation Board – Outdoor Adventure Guide Iowa Association of County Conservation Boards © 1997

# Wildlife Management Areas in Region 6

Area	Game	Acreage/Description	Location/Directions
Hendrickson Marsh	D,P,W,R	775 acres; 2/3 Upland, 1/3 Marsh, Lake	2.5 miles W of Rhodes on E63 (Marshall County)
Highway 21	P,W	7 acres; Marsh	2.5 miles N of Elberon on Hwy 21(Tama County)
Iowa River Corridor	D,T,P,W,Dv	10,326 acres; 1/2 Bottomland timber, 1/2 Grassland	0.5 mile S of Chelsea on V18 OR 2 miles NW of Marengo on F15, 2 miles N of Koszta on F Ave (Tama County)
<u>Kunch</u>	P,R,Dv	162 acres; Upland	4 miles N of Toledo on Hwy 63, 1 mile E on 270th St, 1 mile N on K Ave, 1 mile E on 260th St, 0.5 mile N on L Ave (Tama County)
Otter Creek	D,T,P,W	3,510 acres; 1/2 Marsh, 1/4 Timber, 1/4 Upland	1 mile NW of Chelsea on E66 (Tama County)
Salt Creek	D,T,S	117 acres; Timber	1 mile E of Vining on V Ave (Tama County)
Spring Grove	P,W,R,Dv	117 acres; 3/4 Upland, 1/4 Wetlands	3 miles W of Garwin on E27, 3 miles N on B Ave (Tama County)
<u>Union Grove</u>	P,W,R,Dv	108 acres; 3/4 Upland, 1/4 Lake	4 miles S of Gladbrook on T47, 1 mile W on 220th St
<u>Vermace Woods</u>	D,T,S	113 acres; Timber	3 miles S of Belle Plaine on Hwy 21, 2 miles W on 110th St, 1 mile N on 240th St
West Salt Creek	D,P,R,Dv	80 acres; Upland	0.5 mile SW of Vining on T Ave

Source: Iowa Department of Natural Resources

https://www.iowadnr.gov/hunting/places-to-hunt-shoot/wildlife-management-areas

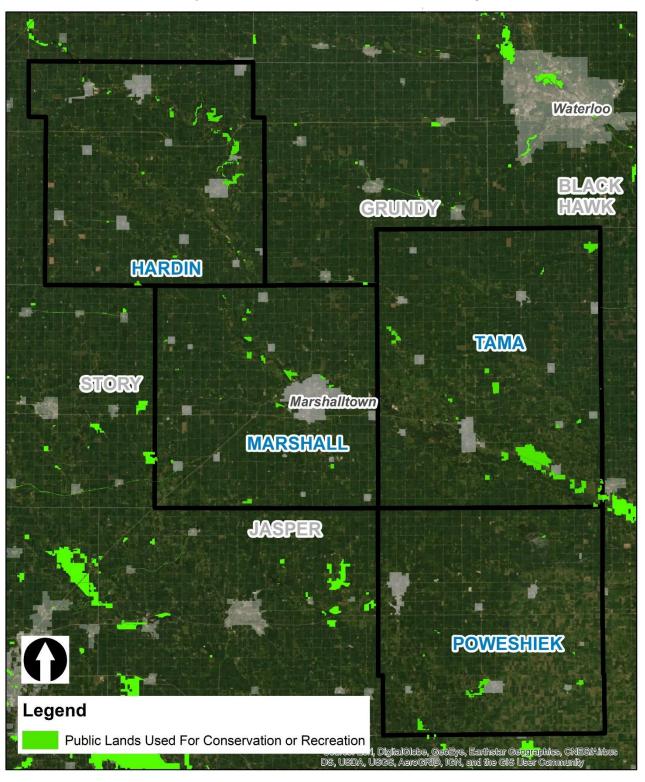


Source: Iowa Department of Natural Resources



Source: Google.com

Public Lands Used for Conservation and Recreation in the Region 6 Area

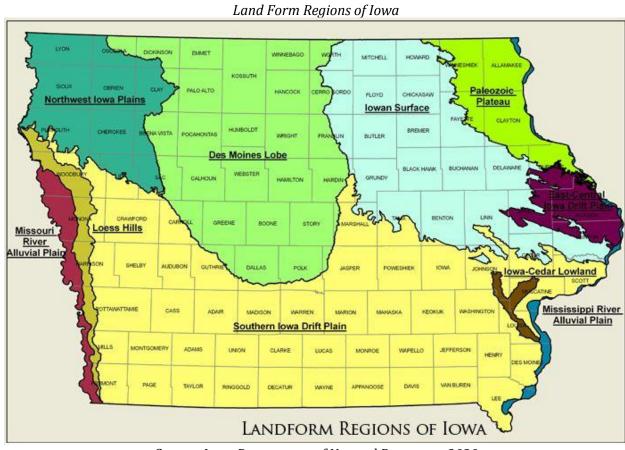


Source: Iowa Department of Natural Resources Geodata, 2020

#### **Hardin County**

Hardin County has an area of 367,168 acres, or about 576 square miles. Most of the soils in the county are nearly level to gently sloping or moderately sloping. Those moderately sloping soils are mostly in the southeastern portion of the county.

Approximately 90% of the county is included in the Iowa River watershed and its immediate tributaries (1981 Hardin County Soil Survey). Ten square miles in the southwest corner of the county is drained by a tributary of the Skunk River, and 30 square miles in northeast Hardin County are drained by Cedar River tributaries. Approximately 32% of the soils in the county are poorly to very poorly drained, but they are suitable for crop production with appropriate tile drainage. Pooling, ponding, and slow-draining pockets exist in the county without subsurface tile drainage due to Hardin County's proximity on the edge of the Des Moines Lobe.

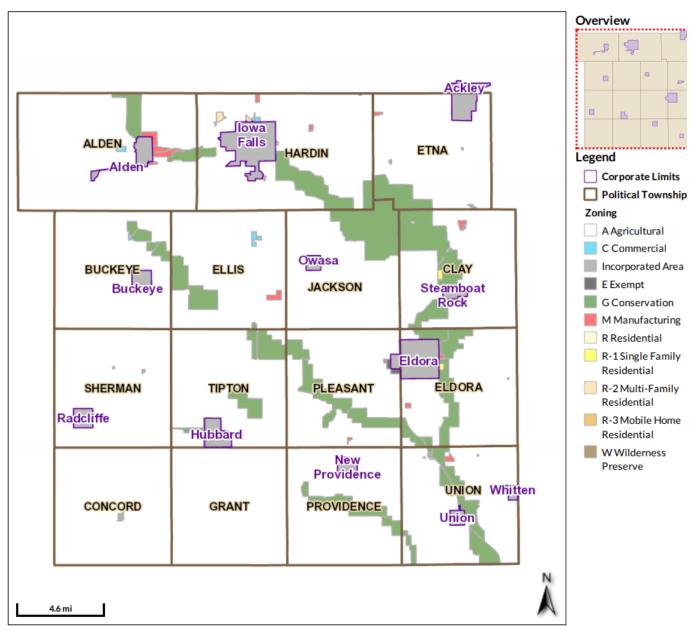


Source: Iowa Department of Natural Resources, 2020

About 260,000 acres, which is about 71% of Hardin County land is prime farmland. Some of this land, has been developed, but the county remains primarily rural and agricultural. Hardin County's geography also supports natural recreation opportunities. The Iowa River Greenbelt, which runs along the Iowa River, is a 42-mile stretch of river valley that runs through Hardin County from Alden through Iowa Falls, Steamboat Rock, Eldora, and Union. This area offers an unusual concentration of recreational opportunities, diverse wildlife habitats, and spectacular views. Most of the greenbelt is accessible from the Iowa River Greenbelt Scenic Drive that extends from Alden to Eldora. The area is also accessible by hiking, biking, and canoeing.

Other natural resources in Hardin County include forest cover—Fallen Rock, Hardin City Woodland Forest, and Mann Wilderness Area—which are preserved by the state. There is also a state park in Hardin County, Pine Lake State Park, which is located near Eldora. A list of parks located in Hardin County is included on the following page.

Hardin County Unofficial Zoning Map 2020 Source: Beacon, Hardin County 2020



# Parks in Hardin County (52)

Park Name	County	Address	City
Alden River Access	<u>Hardin</u>	Hwy D15	Alden
Anders Wildlife Area	<u>Hardin</u>	25496 150th. St.	Iowa Falls
Arthur Hilker Wildlife Area	<u>Hardin</u>	340th St.	Hubbard
Bates Addition	<u>Hardin</u>	33671 D65	Union
Beau Addition to Hardin County Woodland	<u>Hardin</u>	170th St.	Steamboat Rock
Bessman-Kemp Park	<u>Hardin</u>	12260 EE Ave	Iowa Falls
Bigelow Park (no picture)	<u>Hardin</u>	10053 EE Ave	Popejoy
Bob & Eleanor Welden Wildlife	<u>Hardin</u>	13172 N Ave	Iowa Falls
Bob & Joell deNeui Wildeness	<u>Hardin</u>	150th St. and T Ave	Iowa Falls
Boddy-Hunt Wildlife Area	<u>Hardin</u>	218111 Hwy 65	Iowa Falls
Brekke Memorial Park	<u>Hardin</u>	32087 Hwy D67	Union
<u>Calkins Nature Area</u>	<u>Hardin</u>	18335 135th Street	Iowa Falls
Charles F. Long Memorial Woods	<u>Hardin</u>	29323 S 62	Union
Charles F. Long Wildlife Woods	<u>Hardin</u>	310th St., W. Avenue	Union
Cross' Ford River Access	<u>Hardin</u>	15491 00 Ave	Iowa Falls
Daisy Long Memorial Park/Bates Addition	<u>Hardin</u>	33671 Hwy D65	Union
Daryl deNeui Memorial	<u>Hardin</u>	150th & T Ave	Iowa Falls
<u>David Bates Memorial Park</u>	<u>Hardin</u>	33155 290th St.	Eldora
Eagle City Addition (Upper)	<u>Hardin</u>	27951 160th St.	Iowa Falls
Eagle City Park (Lower)	<u>Hardin</u>	27799 160th St.	Iowa Falls
Fallen Rock St Presrve/Fallen Rock Wildlife Area	<u>Hardin</u>	18499 S56	Steamboat Rock
Flowing Well Park	<u>Hardin</u>	17256 Hwy S27	Buckeye
Gehrke Wildlife Area	<u>Hardin</u>	220th St.	Buckeye
Girl Scout Area	<u>Hardin</u>	D15 & J Avenue West	Iowa Falls
Hardin City Woodland	<u>Hardin</u>	30768 170th St.	Steamboat Rock
Hardin County Conservation Offices	<u>Hardin</u>	15537 "S" Avenue	Ackley
Hubbard Prairie (West)	<u>Hardin</u>	175 W	Hubbard
Iowa Falls River Access (Canoe Launch)	<u>Hardin</u>	23101 130th St.	Iowa Falls
<u>Ira Nichols Outdoor Classroom</u>	<u>Hardin</u>	Pine and River St.	Iowa Falls
<u>Lepley Park</u>	<u>Hardin</u>	29731 Hwy S62	Union

<u>Leverton Timber (no picture)</u>	<u>Hardin</u>	185th St.	Steamboat Rock
<u>Logsdon Park</u>	<u>Hardin</u>	21811 Hwy 65 South	Iowa Falls
Mann Wilderness Area	<u>Hardin</u>	30491 160th St.	Cleves
Meier Wildlife Refuge	<u>Hardin</u>	18892 175th St.	Hubbard
Nichols Timber (no picture)	<u>Hardin</u>	160th St.	Ackley
Ox Bow Lake Area (River Access Only)	<u>Hardin</u>	T Avenue	Cleves
Parline Pierce Wildlife Area	<u>Hardin</u>	27951 160th St.	Iowa Falls
Pine Ridge Addition (no picture)	<u>Hardin</u>	31458 Co Hwy D35	Steamboat Rock
Pine Ridge Park	<u>Hardin</u>	31458 Hwy D35	Steamboat Rock
Reece Memorial Park	<u>Hardin</u>	26095 310th St.	New Providence
Ruby Woodland/Wildlife Area (no signage yet)	<u>Hardin</u>	20608 S56	Steamboat Rock
Sac & Fox Wildlife Area	<u>Hardin</u>	19501 S56	Steamboat Rock
Sand Springs Wildlife Area	<u>Hardin</u>	18499 S56	Steamboat Rock
Setchell Area	<u>Hardin</u>	17001 V Avenue	Steamboat Rock
Sylvan Hill	<u>Hardin</u>	30768 170th St.	Steamboat Rock
<u>Tower Rock</u>	<u>Hardin</u>	20392 Co HwyS56	Steamboat Rock
Twin Elms	<u>Hardin</u>	180th and G Ave	Buckeye
Walter Max Long Addition	<u>Hardin</u>	33671 D65	Union
Welden Wildlife Area (River Access Only)	<u>Hardin</u>	MM Avenue	Iowa Falls
Wildcat Trail	<u>Hardin</u>	215th St.	Eldora
Wilkinson Wildlife Area (no picture)	<u>Hardin</u>	155th St.	Steamboat
Ziesman Wildlife Area	<u>Hardin</u>	230th St, M Ave	New Providence

**Source:** https://www.mycountyparks.com/county/Hardin/Parks.aspx



Summer 2011

#### **Marshall County**

Marshall County has an area of nearly 366,733 acres, or about 573 square miles. Most of the soils in the county are nearly level to gently sloping or moderately sloping. Marshall County is one of the moderately hilly, central counties in Iowa.

Marshall County is a part of three major watersheds: the Iowa River, the Cedar River and the Skunk River (1981 Marshall County Soil Survey). Nearly 80% of the county is drained by the Iowa River and its tributaries. A small area in northeastern Marshall County is drained by the Wolf Creek, which ultimately flows to the Cedar River, and the remaining area in the southwestern portion of the county is drained by the Skunk River. Roughly 12% of the soils in the county are classified as poorly to very poorly drained. Subsurface tile drainage may be installed to mitigate ponding and standing water, but this practice is less common in Marshall County versus other counties more centrally located on the Des Moines Lobe.

Marshall County has seven soil associations. The soil that is predominate—30% of the county—is "moderately sloping, to steep, well drained and moderately well drained, silty and loamy soils formed in loess and glacial till; on uplands." Much of the land is suited for row crops like corn and beans since this association has a good drainage pattern. About 182,000 acres, or 50% of Marshall County land, is prime farmland, perfect for crops, mainly corn and soybeans. Some land that is ideal for agriculture has been converted into industrial and urban uses.

The Iowa River Greenbelt, which runs along the Iowa River, is a 42-mile stretch of river valley that runs through Marshall County from west of Liscomb, to west of Albion and Marshalltown. This area offers recreational opportunities, diverse wildlife habitats, and spectacular views. The Iowa River's Edge recreation trail also traverses through this area and provides an up close and personal immersion into these habitats.



Summer 2014

Marshall County has a myriad of conservation and recreation opportunities available. Many of the larger recreation areas are located north to northwest of Marshalltown along the Iowa River. A list of parks in Marshall County are included on the following page.

+1100 ISCOMB +1200 +1300 +1400 +1500 +1600 CLEMONS ST. ANTHONY +1700 + 1900 + 2000 +2100 +2300 CENTER LE GRAND 2500 +2800 MELBOURNE HAVERHILL RHODE **•** 3000 +3100 +3200 LAUREL GILMAN 2000 2100 2200 2300 2400 2500 2600 2700 2800 2900 3000 3100 3200 1100 1200 1300 1400 3300 MARSHALL COUNTY GIS (Scale 1:166,000)

Marshall County Conservation Area Map

Source: Marshall County Conservation Website

# Parks in Marshall County (29)

Park Name	County	Address	City
Arney Bend Wildlife Area	<u>Marshall</u>	1529 Lafayette Ave.	Albion
Bangor Square Park	<u>Marshall</u>	201 Prairie Street	Union
Bear Grove Forest Area	Marshall	2204 Hart Avenue	State Center
Coppock Park	<u>Marshall</u>	2408 Copock Park Road	Marshalltown
<u>Dillion Park</u>	<u>Marshall</u>	102 Center Road	Marshalltown
Forest Reserve	<u>Marshall</u>	1986 - 135th St.	Liscomb
French Grove Wildlife Area	<u>Marshall</u>	1234 190th Street	State Center
Furrow Access	<u>Marshall</u>	2991 Main Street Road	Marshalltown
Grammer Grove Wildlife Area	<u>Marshall</u>	2030 - 127th Street	Liscomb
Green Castle Recreation Area	<u>Marshall</u>	Green Castle Road	Gilman
Green Century Farm	<u>Marshall</u>	1755 110th Street	Union
Grimes Farm	<u>Marshall</u>	2359 233rd Street	Marshalltown
GrimesFarm & Conservation Center	<u>Marshall</u>	2349 233rd Street	Marshalltown
Heart of Iowa Trail	<u>Marshall</u>	209 S. Main Street	Melbourne
<u>Hollingsworth Timber</u>	<u>Marshall</u>	1763B 126th St	Union
<u>Iowa River Wildlife Area</u>	<u>Marshall</u>	2516 Sand Road	Marshalltown
Iowa River Wildlife Management Area	<u>Marshall</u>	2516 Sand Road	Marshalltown
Linn Creek Recreational Trail	<u>Marshall</u>	Linn Creek Greenway	Marshalltown
Log Cabin Historical Site	<u>Marshall</u>	1482 Morman Ridge	Albion
Mag Holland Access Area	<u>Marshall</u>	2283 Zeller Ave	Marshalltown
Marietta Sand Prairie Preserve	<u>Marshall</u>	1744 Knapp Ave	Albion
Rhodes Timber Wildlife Area	<u>Marshall</u>	708 N. Main Street	Marshalltown
Sand Lake Recreation Area	<u>Marshall</u>	2901 Main Street Road	Marshalltown
Stewart Bird Sanctuary	<u>Marshall</u>	618 N 16th St	Marshalltown
Three Bridges County Park	<u>Marshall</u>	2272 Three Bridges Rd.	Marshalltown
Timmons Grove Park	<u>Marshall</u>	1777 Marsh Avenue	Marshalltown
<u>Van Cleve Park</u>	<u>Marshall</u>	2098 290th Street	Melbourne
Wehrman Prairie	<u>Marshall</u>	3297 Lafayatte Ave	Melbourne
Wickersham Forest Areas	<u>Marshall</u>	2563 Starry Grove Rd	Melbourne

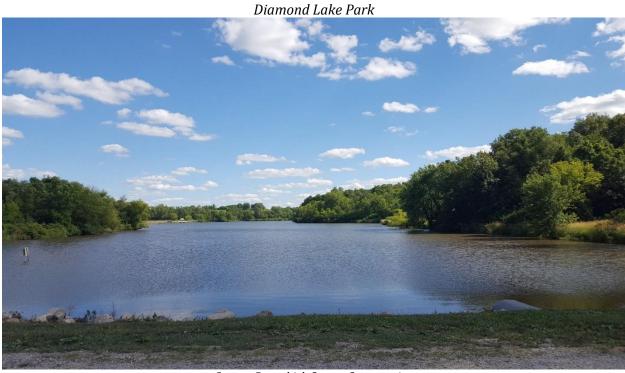
**Source:** https://www.mycountyparks.com/county/marshall.aspx

#### **Poweshiek County**

Poweshiek County has an area of 376,960 acres, or about 583 square miles. Most of the soils in the county are nearly level to gently sloping or moderately sloping. Poweshiek County is relatively diverse in elevation compared to flat north central counties of Iowa due to its local within the Southern Iowa Drift Plain land form region.

The county includes land that is in the Iowa River and the Skunk River watersheds. The English River, a tributary for the Iowa River, originates in the west-central portion of the county, crosses the middle and runs in a southeasterly direction through the southeast corner of the county, while another branch of the same river originates in the very south central part of the county. A segment of the North Skunk River, one of the main rivers in Iowa, crosses through the southwest corner of the county.

Poweshiek has eight soil associations, seven of which are on uplands and one on bottom land. The dominate soil—35% of the county —is "gently and moderately sloping, well drained and moderately well drained soils that formed in loess, on uplands." Common farming products include livestock and grain. Much of the land is used for row crops like corn and soybeans.



Source: Poweshiek County Conservation

There is one state preserve located in Poweshiek County. The Fleming Woods area is a forest cover and biological area. Poweshiek County has two fairly large residential lake developments. One development is focused around Holiday Lake, which is located in the northeast part of the county. The other development is focused around Lake Ponderosa near Montezuma, which is in the south central part of the county. Diamond Lake is also located near Montezuma but this lake is part of a large county park managed by Poweshiek County Conservation. A list of all parks in the county is included on the following page.

#### Parks in Poweshiek County (6)

Park Name	County	Address	City
Deep River Timber Wildlife Area	<u>Poweshiek</u>	4883 Highway 21	Deep River
<u>Diamond Lake Park</u>	<u>Poweshiek</u>	4896 Stagecoach Road	Montezuma
Flemiing Woods State Preserve	<u>Poweshiek</u>	1058 500 Ave.	Montezuma
Fox Forest Wildlife Area	<u>Poweshiek</u>	1171 Diamond Trail Road	Montezuma
Millgrove Access Wildlife Area	<u>Poweshiek</u>	400 River Road	Searsboro
Poweshiek County Conservation Office	<u>Poweshiek</u>	4896 Stagecoach Road	Montezuma

**Source:** https://www.mycountyparks.com/county/poweshiek/Parks.aspx

#### **Tama County**

Tama County has an area of 462,300 acres, or about 720 square miles. The Iowa River, one of the main rivers in the state, crosses the southern part of the county and runs southeasterly to its southeast corner. It is of medium gradient and is subject to flooding of low velocity and short duration in the spring and after periods of heavy rainfall. Damage by flooding is chiefly to the agricultural land in the county. In some areas, loess hills rise quite abruptly to a height of 150 to 200 feet above the river.

Most of Tama County is located on dissected uplands. About 75% of the county is located in the Iowa River Watershed. The principal tributaries that are located in Tama County and ultimately flow to the Iowa River include Deer Creek, Richland Creek and Salt Creek. In the northern part of the county, Wolf Creek flows to the Cedar River. Wolf Creek runs from Gladbrook to about 3 miles south of the northeast corner of the county.

Generally, the topography is nearly level to rolling to very hilly along the Iowa River and its tributaries. Some small areas between the rivers and creeks on the major divides are level or nearly level. Pahas – prominent elongated ridges or elliptical mounds that are 50 to 75 feet above the nearly level plain – are found in the northern part of the county. They are oriented in a northwest-southeast direction. Casey's Paha State Preserve is an excellent example of this geological formation that has been preserved.

Most of the soils in Tama County formed in material that transported from other locations and deposited through the action of glacial ice, water, wind, or gravity. The main kinds of parent material in the county are loess, alluvium, glacial drift, and sand eolian material. Loess, a silt material deposited by wind, covers about 83% of the county. It ranges in depth from about 15 to 20 feet on the more stable ridge tops south of the Iowa River to about 4 to 8 feet on the ridge tops of the Iowa erosion surface in the northern half of the county. In most areas it overlies glacial till.

About 17% of soils in the county formed in alluvium. The major areas of these soils are along the Iowa River and Wolf Creek and their tributaries. The floodplains along the Iowa River and some of the alluvial terraces are large. The floodplain along the Iowa River from the City of Tama to the eastern edge of the county is 0.5 mile to 1.5 miles wide. The stream terrace near the junction of

Otter Creek and the Iowa River is 960 acres. The stream terrace near the junction of Salt Creek and the Iowa River is 1,200 acres.

Other natural resources in Tama County include Mericle Woods, which is forest cover that is also maintained as a biological area. This area is preserved by the State. Casey's Paha is a geologic area in the county that is also preserved by the state.

There are also several wildlife management areas in Tama County. The Otter Creek Marsh near Chelsea is a management area and a refuge in certain areas, so no trespassing is allowed during certain times of the year. Salt Creek and West Salt Creek near Vining and Union Grove near Gladbrook are the other wildlife management areas in the county. Union Grove is one of two state parks in the region.

The area around Union Grove Lake is where the majority of new residential development is occurring in Tama County. The development ranges from traditional homes to cabins to manufactured units. This development has about 200 homes. A list of all parks in the county is included below.

#### Parks in Tama County (15)

Columbia Wildlife Area	<u>Tama</u>	2171 370th St.	Tama
<u>Duffus Landing</u>	<u>Tama</u>	2711 360th Street	Chelsea
Heritage Wetlands Wildlife Area	<u>Tama</u>	3279 320th St	Elberon
<u>Iowa River Natural Area</u>	<u>Tama</u>	2725 360th St	Chelsea
Izaak Walton Shooting Facility	<u>Tama</u>	3055 H Ave.	Toledo
Lohberger Memorial Park	<u>Tama</u>	1701 285th St	Toledo
Long Point Landing	<u>Tama</u>	3469 P Avenue	Tama
Manatt's Landing	<u>Tama</u>	1974 340th St.	Tama
Maria Hladik Roadside Park	<u>Tama</u>	2455 Highway 63	Toledo
McCoy Landing	<u>Tama</u>	2970 C Avenue	Montour
Otter Creek Lake & Park	<u>Tama</u>	2283 Park Road	Toledo
Reinig Wildlife Refuge & Nature Study Area	<u>Tama</u>	1887 295th St.	Toledo
T. F. Clark Park	<u>Tama</u>	2775 150th ST.	Traer
Tama County Conservation Office	<u>Tama</u>	148 Natture Center Rd	Toledo
Wolf Creek Nature Trail	<u>Tama</u>	1596 AA Ave.	Gladbrook

**Source:** <a href="https://www.mycountyparks.com/county/tama.aspx">https://www.mycountyparks.com/county/tama.aspx</a>

# **Cultural and Historic Sites**

The region has nearly 70 properties on the National Register of Historic Places, and many other archaeological and cultural sites. Below is a table of known historic buildings, structures, and districts that are listed on the National Register's geospatial data set.

# Cultural Resources Listed on the National Register of Historic Places in the Region 6 Area

Cultural Resource Name	Туре	County
Illinois Central Combination Depot—Ackley	Building	Hardin (Ackley)
Alden Bridge	Structure	Hardin (Alden)
Alden Public Library	Building	Hardin (Alden)
Civilian Conservation CorpsPrisoner of War Recreation Hall	Building	Hardin (Eldora)
Eldora Public Library	Building	Hardin (Eldora)
First Congregational Church	Building	Hardin (Eldora)
Hardin County Courthouse	Building	Hardin (Eldora)
Carnegie-Ellsworth Public Library	Building	Hardin (Ellsworth)
Edgewood School of Domestic Arts	Building	Hardin (Iowa Falls)
EllsworthJones Building	Building	Hardin (Iowa Falls)
Estes Park Band Shell	Building	Hardin (Iowa Falls)
Iowa Falls Bridge	Structure	Hardin (Iowa Falls)
Iowa Falls Union Depot	Building	Hardin (Iowa Falls)
McClanahan Block	Building	Hardin (Iowa Falls)
Metropolitan Opera House	Building	Hardin (Iowa Falls)
PrincessSweet Shop	Building	Hardin (Iowa Falls)
River Street Bridge	Structure	Hardin (Iowa Falls)
Sentinel Block	Building	Hardin (Iowa Falls)
Slayton FarmsRound Barn	Building	Hardin (Iowa Falls)
St. Matthew's by the Bridge Episcopal Church	Building	Hardin (Iowa Falls)
Union Cemetery Gardener's Cottage	Building	Hardin (Iowa Falls)
US Post OfficeIowa Falls	Building	Hardin (Iowa Falls)
W. R. C. Hall	Building	Hardin (Iowa Falls)
Washington Avenue Bridge	Structure	Hardin (Iowa Falls)
Honey Creek Friends' Meetinghouse	Building	Hardin (New Providence)
New Providence Building Association Stores	Building	Hardin (New Providence)
New Providence School Gymnasium	Building	Hardin (New Providence)
Steamboat Rock Consolidated Schools Building	Building	Hardin (Steamboat Rock)
Matthew Edel Blacksmith Shop and House	Building	Marshall (Haverhill)
Le Grand Bridge	Structure	Marshall (Le Grand)
Quarry Bridge	Structure	Marshall (Le Grand)
Binford, Thaddeus, House	Building	Marshall (Marshalltown)
C. H. Whitehead House	Building	Marshall (Marshalltown)
GlickSower House	Building	Marshall (Marshalltown)
Leroy R., Willard House	Building	Marshall (Marshalltown)
Marshall County Courthouse	Building	Marshall (Marshalltown)
Robert H. Sunday House	Building	Marshall (Marshalltown)
Dobbin Round Barn	Building	Marshall (State Center)
Watson's Grocery	Building	Marshall (State Center)
Brooklyn Hotel	Building	Poweshiek (Brooklyn)
Kent Union Chapel and Cemetery	District	Poweshiek (Brooklyn)

William Manatt House	Building	Poweshiek (Brooklyn)
B. J. Ricker House	Building	Poweshiek (Grinnell)
Bowers and McDonald Office Building	Building	Poweshiek (Grinnell)
Charles H. Spencer House	Building	Poweshiek (Grinnell)
Chicago, Rock Island and Pacific Railroad-Grinnell Passenger Station	Site	Poweshiek (Grinnell)
Farmers Mutual Reinsurance Company Building	Building	Poweshiek (Grinnell)
Goodnow Hall	Building	Poweshiek (Grinnell)
Grinnell Herald Building	Building	Poweshiek (Grinnell)
Grinnell, Levi P., House	Building	Poweshiek (Grinnell)
Interior Telephone Company Building	Building	Poweshiek (Grinnell)
Marsh, E.A. and Rebecca (Johnson), House	Building	Poweshiek (Grinnell)
Mears Hall	Building	Poweshiek (Grinnell)
Merchants' National Bank	Building	Poweshiek (Grinnell)
Pioneer Oil Company Filling Station	Building	Poweshiek (Grinnell)
Spaulding Manufacturing Company	Building	Poweshiek (Grinnell)
Stewart Library	Building	Poweshiek (Grinnell)
Raymond, P. P., House	Building	Poweshiek (Malcom)
New Carroll House Hotel	Building	Poweshiek (Montezuma)
Poweshiek County Courthouse	Building	Poweshiek (Montezuma)
Lincoln Highway Bridge	Structure	Tama (Tama)
Tama County Jail	Building	Tama (Tama)
First United Brethren Church	Building	Tama (Toledo)
Hope Fire Company Engine House	Building	Tama (Toledo)
Tama County Courthouse	Building	Tama (Toledo)
Wieting Theater	Building	Tama (Toledo)
Round Barn, Buckingham Township	Building	Tama (Traer)
Star-Clipper-Canfield Building and Winding Stairway	Building	Tama (Traer)
Young, John W., Round Barn	Building	Tama (Traer)

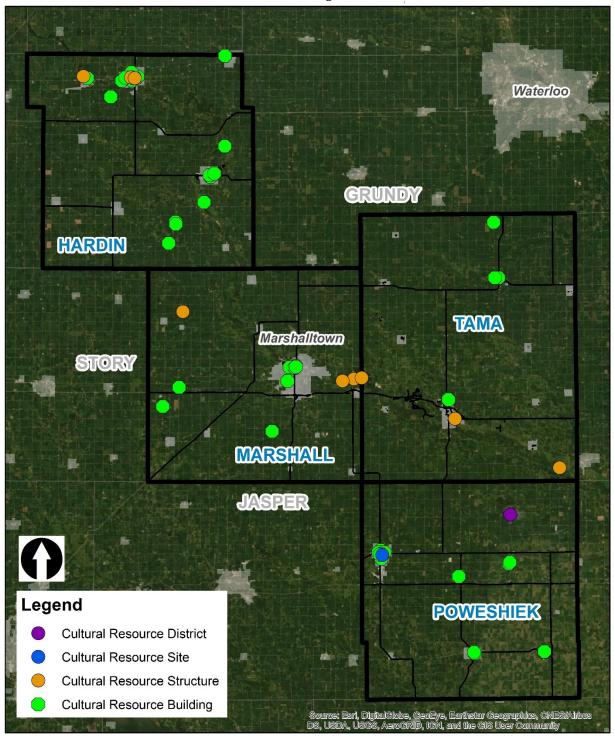
Source: National Park Service US Department of the Interior, The National Register geospatial data set <a href="https://irma.nps.gov/Datastore/Reference/Profile/2210280">https://irma.nps.gov/Datastore/Reference/Profile/2210280</a>

# Buildings and Structures on the Historic Register in the Region 6 Area



From left to right: Jewel Box Bank / Merchant's National Bank in Grinnell, Lincoln Highway bridge near Tama, and Traer Star Clipper Building and Winding Stairway in Traer.

Cultural Resources in Region 6 Area



Source: National Park Service US Department of the Interior, The National Register geospatial data set <a href="https://irma.nps.gov/Datastore/Reference/Profile/2210280">https://irma.nps.gov/Datastore/Reference/Profile/2210280</a>

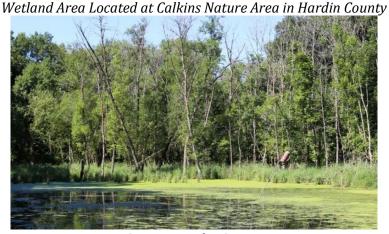
#### Geography, Land Use and Environment - Important Considerations

- ✓ The geography of Region 6 is typified by rolling hills and plains, including some of the state's most productive farmland.
- ✓ The region's lakes and streams are assets for the cultural, economic, and agricultural pursuits of the region; these waterways are vulnerable to contamination from human habitation on the land's surface from both agricultural and urban land uses.
- ✓ The Iowa River and its associated creeks are prone to major flooding. The most recent and major flood events were in 1993 and 2008.
- ✓ Conservation of valuable farmland will become increasingly critical in the coming years, as will protection of natural wetlands and wildlife habitat. Preservation of recreational areas will also be a high priority as the population migration from rural to urban centers in Iowa will put pressure on prime farmland in the rural-urban interface.

#### **Potential Environmental Mitigation Activities**

In our region, it is important to preserve and protect the natural and cultural resources that make the area unique. Protection should occur not only to comply with environmental regulations, but also to maintain the benefits of these special areas and resources. Region 6 Resource Partners has not developed any existing or planned projects that would require any mitigation activities. Our primary environmental goal is to locate and build projects without adverse impacts on the environment.

The overwhelming priority is to maintain the current roads and bridges. Limited trail funds should be used to complete rail trail extensions from Marshalltown to the Steamboat Rock area, as well as to select projects that continue building trail networks and safe routes to school in the region. The rail trail would be done on the existing railbed with no further changes. RPA 6 is not aware of any significant mitigation actions that should be done due to a large future construction project. There may need to be some mitigation projects along US Highway 30 as the 4 lane project goes across Benton County in the next few years. There do not appear to be huge flooding or wetland problems over that length that add challenges like the Iowa River channel in Marshall and Tama Counties.



Source: Hardin County

## CHAPTER 6: REGIONAL TRANSPORTATION SYSTEM – STRENGTHS, WEAKNESSES, THREATS, AND SOLUTIONS AND ALTERNATIVES

#### **Overview**

Region 6, similar to the rest of the state, has myriad transportation opportunities. Major highways, national railroads, public transportation, and Iowa's expanding trail system are primary components of the transportation system that serves Region 6. In this chapter we will review the strengths, weaknesses, and threats of each transportation component, followed by examples of potential solutions and alternatives to address the identified needs.

#### **Strengths**

#### **Highways**

The counties of Region 6 are connected to one another, the state, and the country by three federal highways (U.S. Highways 65, 63, and 20), six state highways (State Highways 14, 21, 146, 175, 6, and 30) and Interstate 80. State Highway 330 also connects the region to the Des Moines metropolitan area. According to measured Average Annual Daily Traffic (AADT) in 2016, Region 6 has seven high traffic areas which are located on Interstate 80, State Highway 14, U.S. Highway 30, U.S. Highway 20, and State Highway 146. Pavement conditions in the region are generally good.

#### Freight and Rail

Freight transportation for both semi-trucks and rail is a major strength in the region. Comprehensive freight resources can be helpful in attracting and retaining businesses and increase economic opportunities.

#### **Trails**

Fourteen trails extend and connect throughout Region 6. These include: Wolf Creek Trail, Tama Toledo Recreation Trail, Stagecoach Trail at Diamond Lake County Park, Rock Creek Trail, Rock Run Creak Trail, Pine Lake State Park Trail, Old Creamery Trail, Linn Creek Highway 30 Trail, Linn creek Greenbelt Parkway, Iowa River's Edge Trail, Iowa 330 Trail, Heart of Iowa Nature Trail, Hubbard Trail, and Grinnell Trail.

#### **Public Transit**

Two public transportation systems serve the Region 6 area. Peoplerides is a demandresponse transportation system that provides door-to-door transit for the region. Marshalltown Municipal Transportation is a fixed-route transit system that serves the City of Marshalltown. Cohesive public transportation options help increase economic opportunities and provide citizens access to essential services.

#### Weaknesses

#### **Highways**

Although the majority of highway pavement conditions are considered fair to good, three areas are considered very poor, with a few areas rated poor. Region 6 lacks a north-south four-lane highway between I-35 and I-380. U.S. Highway 63 is a two-lane north-south highway that runs between I-80 and Hwy 20 in Region 6. U.S. Highway 63 is inconsistent and runs through numerous communities. A group of U.S. Highway 63 supporters has proposed improving U.S. highway 63 from Oskaloosa to Waterloo.

#### **Bridges**

There are 1,146 bridges in Region 6, 31.8% of which are structurally deficient. Postponed bridge maintenance and replacements poses a risk of impeding upon travel routes, which in rural areas can cause severe implications for accessibility and travel time.

#### Freight and Rail

Infrastructure funding is not adequate to replace deficient bridges and keep parts of the transportation system well maintained. Few alternative funding opportunities exist for freight infrastructure, for which maintenance and replacement costs are extremely high.

#### **Trails**

Funding is the primary weakness for trails in Region 6. This includes funding to develop and maintain major trail systems like the Iowa River's Edge Trail and funding to extend smaller systems like the Grinnell Area Recreational Trail, and Iowa Falls Trails. Maintenance funding for existing trails is also a threat – including funding for repaving older trails such as the Linn Creek Trail system in Marshall County and Marshalltown, the Heart of Iowa Trail, the Tama-Toledo Trail, the Diamond Lake Trail near Montezuma, and others.

#### **Public Transit**

Public transportation in rural areas can be costly and less convenient than personal transportation options. Fare structures of public transit can prevent barriers by reducing the convenience of payment options.

#### **Opportunities**

#### **Highways**

Three areas of highways in Region 6 are considered very poor, with a few more areas rated poor. These areas provide opportunities to improve pavement conditions which may be possible through grant funding and traffic mitigation to reduce roadway wear. Region 6 lacks a north-south four-lane highway between I-35 and I-380. U.S. Highway 63 is a two-lane north-south highway that runs between I-80 and Hwy 20 in Region 6. U.S. Highway 63 is inconsistent and runs through numerous communities. This connection is a potential opportunity to improve connectivity throughout the region.

#### **Bridges**

The 31.8% of bridges throughout Region 6 that are structurally deficient. Postponed bridge maintenance and replacements poses a risk of impeding upon travel routes, which in rural areas can cause severe implications for accessibility and travel time.

#### **Trails**

A major opportunity for trail transit in Region 6 is to identify more diverse funding to develop and maintain major trail systems like the Iowa River's Edge Trail and funding to extend smaller systems like the Grinnell Area Recreational Trail, and Iowa Falls Trails. Maintenance funding for existing trails is also an opportunity for improvement in the region including trail crossings for the Iowa River's Edge Trail.

#### **Public Transit**

One opportunity to expand public transit in Region 6 is to identify contract needs in the region. Another opportunity for public transit is to review and revise the fair structure and current routes to help maximize efficiency in the public transit system.

#### **Threats**

#### **Bridges**

Extreme wear on bridges from oversized vehicles including semi freight and agricultural equipment also pose a threat for bridge maintenance and replace and exacerbate the threat caused by funding.

#### **Public Transit**

Public transportation faces threats of declining ridership as the population decreases. Along with other areas of transportation, public transit faces the threat of inadequate funding sources.

#### Solutions and Alternatives

Bridge maintenance and replacement can be expensive and time consuming. Two opportunities to consider are concrete culverts and side-of-site construction. Concrete culverts are precast concrete bridges that are safe, low-cost alternatives to traditional bridge repair. A similar procedure is to construct a replacement bridge next to the site and replace the previous bridge when the product is ready. This method reduces costs of traditional maintenance and replacement by limiting direct bridge work and mitigating traffic impacts.

#### **Trails**

Tw threats imposed upon the region 6 trail system are air pollution and rural traffic.

#### **Summary**

#### Strengths

Adequate pavement conditions provide Region 6 with interconnected travel options. Multimodal freight systems and public transportation options increase economic opportunities and quality of life for patrons in the region. A growing trail system provides the region with recreation and conservation opportunities.

#### Weaknesses

Bridges throughout the region are problematic for Region 6's transportation system. Maintenance and expansion of transportation infrastructure for roadways, fright/rail, bridges, and trails are areas of needed improvement in the region. Efficiency of freight and public transportation, as well as advertising of public transportation also provide the region with opportunities for advancement.

#### **Opportunities**

General opportunities to improve the transportation system in Region 6 are to identify new funding opportunities and to increase connectivity and efficiency of transportation systems in the region.

#### **Threats**

A major threat for all areas of transportation in Region 6 is a decreasing population that is also increasing in age. As the population becomes more sparse and elderly, alternative transportation options will be necessary for economic sustainability and connectivity throughout and beyond the region.

#### Solutions and Alternatives

A key solution to improve transportation infrastructure in Region 6 and throughout Iowa is to increase funding opportunities for infrastructure and maintenance. Advancing legislation to increase funding available for transportation is central to infrastructure maintenance and future development. Developing place-specific solutions and circumstantial alternatives is vital for the health and growth of Region 6's transportation system. It is imperative to maximize funding opportunities that arise and to develop partnerships between communities, agencies, and public and private stakeholders.

#### CHAPTER 7: IMPLEMENTATION

#### Overview

The following chapter identifies action items to guide the implementation of the goals and objectives identified in chapter two. These action items were developed to be supportive of the needs expressed through community outreach and those identified throughout the LRTP. Progress of the action items will be assessed during annual LRTP reviews, with updates and amendments added when necessary.

## Goal 1: Provide an efficient, multimodal transportation system to promote connectivity and mobility.

*Objective 1.1: Affordability.* Provide convenient, affordable transportation throughout the region.

- Review fare structures of public transportation options.
- Analyze the feasibility of micro-transportation options throughout the region.

*Objective 1.2: Mobility.* Support accessible transportation modes for individual and commercial needs.

- Evaluate future infrastructure needs based on freight, personal, and public transportation trends.
- Support infrastructure that promotes economic, environmental, and socially responsible sustainability.

*Objective 1.3: Public Health.* Support active, healthy, and safe transportation options including recreational trails and multimodal roadways.

- Support roadway infrastructure that includes bicycle lanes.
- Support projects that enhance livability for individuals of differing abilities including the aging population.
- Evaluate strategies that work towards creating Well Certified Communities and enhance public and individual health.

#### Goal 2: Maintain and improve existing infrastructure.

*Objective 2.1: Cost Effectiveness.* Identify and prioritize projects that provide a high benefit to cost.

 Review potential projects and seek funding for those with high-benefits and lower costs.

*Objective 2.2: Interconnectivity.* Maximize the interconnectivity of roadways, sidewalks, bicycle facilities, trails, transit and other transportation system components to provide safe and convenient pedestrian, bicycle, transit and motor vehicle mobility.

- Develop an inventory of transportation infrastructure and facilities.
- Identify areas of improvement and their potential funding sources.

*Objective 2.3: Safety.* Identify and prioritize projects that enhance safe mobility throughout the region.

- Conduct walkability analysis to identify areas of improvement.
- Develop walkability improvement plan to help reduce the dependence of vehicles within communities in the region.

#### Goal 3: Improve Safety and Security

*Objective 3.1: Roadway Safety.* Identify and prioritize improvements that reduce the number and severity of traffic crashes.

• Identify traffic crash trends and explore innovative, situationally appropriate methods to mitigate high crash-frequency areas.

*Objective 3.2: Bicycle and Pedestrian Safety.* Implement safety programs and enhancements for bicycle and pedestrian facilities.

- Develop inventory of current and needed bicycle and pedestrian signage and pavement markings.
- Seek funding opportunities to enhance safety features of trails and roadways including signage, pavement markings, streetlights, trail lights, and other safety improvements.

*Objective 3.3: Hazard Mitigation.* Support emergency response and evacuation, post-disaster recovery, and help improve local, state, and national security.

- Analyze network vulnerability and roadway capacity throughout the region.
- Coordinate with partner agencies to develop a regional emergency preparedness plan including a hazard mitigation plan, evacuation plan, and pandemic plan.
- Evaluate and prepare for transportation emergencies including public transit evacuation and primary artery obstruction.

#### Goal 4: Provide an inclusive, accessible, and equitable transportation system.

*Objective 4.1: Transit access.* Support transportation investments that improve public transit services for low income and transit dependent populations to increase access to goods and services that improve quality of life.

- Evaluate public transportation trends in relation to location of services.
- Analyze necessity and feasibility of expansion of public transportation services to increase access to employment, health, and services that improve quality of life.

Objective 4.2: Transportation equity. Identify the needs of low income and minority populations and develop strategies to ensure that transportation projects do not disproportionally burden low income and minority populations and produce procedures that avoid or mitigate adverse impacts.

• Actively engage low-income and minority populations in public participation, allowing anonymous responses to increase likelihood of engagement.

*Objective 4.3: Public Participation.* Provide open, inclusive opportunities for public input and develop outreach strategies that encourage citizens of all socio-economic demographics to participate, with a focus on low-income and minority populations.

- Provide resources and outreach including public participation opportunities in alternative languages as necessary.
- Provide opportunities for community input through community services that may be utilized by low-income individuals and families such as food pantries and income-assistance programs.

#### Goal 5: Enhance sustainability of the region.

*Objective 5.1: Enhance Economic Sustainability.* Provide transportation services that promote local and regional economic growth and support transit programs that improve access to employment and education.

- Evaluate impact of transportation on employment accessibility throughout the region.
- Seek funding to develop employment transportation program to help individuals find and maintain employment.

*Objective 5.2: Improve Environmental Sustainability.* Support transportation projects and programs that minimize impacts to natural resources, reduce greenhouse gas emissions, and reduce pollutants that adversely impact soil and water quality.

- Support the protection environmentally jeopardized areas.
- Conduct feasibility study for procurement of sustainable public transportation options.

*Objective 5.3: Efficiency.* Develop evaluation strategy and implement programs that maximize the efficiency of economic resources.

- Analyze efficiency of public transportation programs and reduce duplication of services to open resources for new programs.
- Evaluate economic needs throughout the region and identify transportation programs to address needs revealed.

#### Goal 6: Develop, maintain, and promote quality community spaces.

*Objective 6.1: Evaluate and Promote Walkability.* Evaluate bicycle and pedestrian mobility throughout the region and prioritize projects to enhance person-centered mobility options including, but not limited to, trail access and connectivity.

- Identify economic and residential nodes and support projects that enhance movement between and throughout economic and residential nodes.
- Identify potential connections between recreational trails and sidewalks and work to increase trail accessibility to and from communities and economic centers.

*Objective 6.2: Comprehensive Planning.* Integrate transportation and land use planning to enhance livability and economic opportunity throughout the region.

- Evaluate relationship between transportation and land-use patterns.
- Support transportation projects and programs that enhance spatially optimized community design.

*Objective 6.3: People-Oriented.* Plan and develop community transportation corridors that enhance quality of life for individuals in the region.

- Evaluate connectivity of transportation infrastructure.
- Identify and prioritize projects that optimize movement patterns.

#### CHAPTER 8: FUNDING STRATEGIES

#### **Surface Transportation Block Grant Funds**

The Region 6 Resource Partners Board of Directors determines where Region 6 STBG funds shall be expended. The Region 6 Transportation Committee recommends projects to the Region 6 Board.

Region 6 Resource Partners Commission annually takes applications for the STBG funds. All regional cities, counties, and the Sac & Fox tribe are sent applications via email, and are encouraged to submit eligible applications.

Each applicant applies for their priority projects. Projects are chosen by Region 6 Resource Partners that comply with the Region 6 Resource Partners Transportation Plan and are recognized regional and local needs. The projects that are funded are on roads in poor condition or the investment is clearly needed for the other permitted STBG modes (e.g. public transit).

Applications include selection criteria as based upon need and contribution to the transportation system. Applications are discussed and ranked by the Transportation Committee, which acts as the project selection committee for STBG projects and also reviews, prioritizes, and recommends TAP projects to the IDOT for potential funding. The Committee uses qualitative methods for ranking projects and recommends projects for funding following presentation and discussion.

The regional challenge is to maintain roads adequately – the worst condition roads are funded first. The region uses some target amounts for cities over 5000 people and counties, but these targets are not strictly followed on a yearly basis.

#### **Iowa's Transportation Alternatives Program Funds**

Region 6 Resource Partners has a slightly new application process for these funds. The process will proceed as follows:

- Region 6 will notify the IDOT, all cities and counties, the Sac & Fox Tribe, scenic byway groups, bicycle groups, and others who may have an in Iowa's TAP funding,
- Region 6 will provide applications to the IDOT for review and comment prior to our review.
- The Region 6 Transportation Committee will review the applications and the comments from the IDOT.
- The Region 6 Transportation Committee will make recommendations to the Region 6 Board of Directors.
- After the Region 6 Board approves the recommendations the applicants will be notified in writing about the status and timing of the award.

#### **Public Transit**

The federal transit assistance funds for transit services in Region 6 (Peoplerides and Marshalltown Municipal Transit) come from two federal transit assistance programs – 5309 and 5311. The 5309 program is a federal program for capital projects. The 5309 will be the primary capital replacement program for Peoplerides transit. Region 6 may need to use local funds to replace some equipment. The 5311 funds are primarily for operating.

The Region 6 Board of Directors has final approval of all projects that are included in the Region 6 Transportation Improvements Program as well as being responsible for the day-to-day operations of the Commission.

#### **Regional Project Prioritization Process**

Roadways across Region 6 are under the jurisdiction of Cities, Counties, and the Iowa Department of Transportation. Funding for the planning, engineering, construction and maintenance of these streets and highways is provided through federal, state, and local tax revenues and user fees including road use-motor fuel taxes, property taxes, special tax levies, and motor vehicle registration and drivers' license fees.

Each year Region 6 is designated to receive a portion of the Surface Transportation Block Grant (STBG) funds that are available from the State of Iowa for roadway improvements or non-roadway projects. STBG funds may be used on either the National Highway System (NHS) or Federal Aid eligible routes. The annual STBG fund target including 70% of STBG-TAP flex funds for Region 6 Resource Partners Commission, for 2021-2024, averages \$2,724,000 per year.

The STBG projects working budgets are created and monitored by Region 6 staff for review by the Transportation Committee from applications submitted by project sponsors. Projects are chosen by the Transportation Committee for recommendation to the Executive Board to be included in the TIP. Funding for projects in any of the annual elements can be moved from one year to another. Projects recommended for funding are targeted to stay within the forecasted budget for each of the fiscal years in the 4-year plan. However, a small amount of funding may exceed or may be carried over from one fiscal year to another to accommodate a project, but the funding is constrained to fit within the range of the current TIP, ending with a positive balance.

#### Regional Transportation - Past, Present, and Future Impacts

Transportation is a critical element of maintaining a healthy regional economy. Without good roads and the ability to move goods to market, businesses will reinvest their resources elsewhere. Maintaining a safe network of roads is a regional and a statewide concern, making the funding of safety improvements to the transportation system a high priority. Additionally, increasing numbers of goods being transported over the system are causing a need for more and improved transportation capacity. In many cases, network capacity improvements will need to receive funding from a variety of sources, including local, state, or federal funds.

#### **Coordination with Adjacent Regional Planning Affiliates**

Transportation investment decisions made by Region 6 Resource Partners also have an impact on counties in adjacent regions, and vice versa, making cooperation between regions both prudent and necessary.

Region 6 staff members strive to ensure inter-regional coordination through:

- Participation at quarterly IDOT regional planning affiliates meetings;
- Participation in Iowa Association of Regional Councils meetings and events;
- Information exchange with other regions on any projects that may have some inter-regional implications. These projects have included Highway 30, and Highway 20 improvements and expansions.

Neighboring jurisdictions can improve their economic health by working together to develop a coordinated network of good roads and highways, viable public transit options, walkable communities, connecting bike and recreational trails, and cooperative marketing efforts.

#### **Road System Maintenance**

With the system needs and funding limitations, few projects can be developed beyond basic maintenance. Programming of county roads takes average daily traffic and age of road into consideration, making farm-to-market roads a priority, but targeting the worst roads first. No funding is available for converting granular to hard surface except for new housing and commercial developments. Most cities of less than 5,000 in population do not have capital improvement programs. These communities also must tend to their worst roads first.

With increasing costs of construction and fewer financing resources, regional governments may need increasingly to rely upon their own resources for transportation projects such as local bond issues or a local option sales tax. In many cases these resources have been exhausted, and the lack of funding will lead to a decline in quality of the system.

Historical transportation enhancement investments have assisted the Region in constructing trail projects through county, city, and state parks. The new funding label is transportation alternative projects. The challenge with the new title is that the funding decreased 17% and the list of eligible projects now includes sidewalk improvements.

It will be an annual challenge to best determine where to program \$162,000 of transportation alternative program funding. There is a 32 mile trail that will desire funding. There are trail extensions in Iowa Falls, Marshalltown, and Grinnell that will desire funding. Some of the older trails like the Linn Creek Trail system will also desire resurfacing or other funding. These desires greatly exceed the amount of available regional funding.

There will be new demands for scenic by-way projects and potentially pedestrian improvement projects. The regional decision makers will have to determine where to best use these very limited resources. Each applicant for funding will need to demonstrate that the project will achieve significant regional and local benefits.

#### **Regional Airports**

Federal and state aid will be an important element in maintaining and upgrading the regional airports. The Marshalltown Municipal Airport will receive \$120,000 in state funding for a rotating beacon and other site improvements. Without this aid, airport maintenance and improvements will be severely limited.

#### **Rail Transportation**

It will be important to increase railroad transportation for commerce and passenger movement. Federal and state funding will be needed to develop and maintain passenger rail systems.

## Surface Transportation Program and Transportation Alternative Program Funding Priorities

R	REVENUE	PLACE	PROJECT	EXPENSE		
			BALANCE END OF 2020	\$	2,151,784	
2021	\$ 2,562,000	IOWA's STRC ALLOCAT	ION + 70% IOWA's STBG-TAP-FLEX			
2021	\$ 2,302,000	REGION 6	PLAN & PROGRAM	S	20.000	
2021		STATE CENTER	4TH STREET: 3RD ST SW TO 6TH AVE SE	S	20,000	
				•	394,000	
2021		HARDIN COUNTY	D55: HWY 65 TO S55, & S33 FROM D55 TO HW		1,500,000	
2021		MARSHALL COUNTY	S52 FROM STATE CTR TO E29	\$	600,000	
2021		PEOPLERIDES - R6	1 EXPANSION MINIVAN	\$	42,000	
2021		ACKLEY	BUTLER ST: 3RD AVE TO N PARK	\$	100,000	
2021		POWESHIEK COUNTY	F17 FROM V30 TO IOWA CL	\$	1,000,000	
2021		TAMA COUNTY	E64 - RICHLAND CREEK TO V18	\$	970,000	
			TOTAL 2021	\$	4,626,000	
			BALANCE END OF 2021	\$	87,784	
2022	\$ 2,562,000	IOWA's STBG ALLOCAT	ION + 70% IOWA's STBG-TAP-FLEX			
2022		REGION 6	PLAN & PROGRAM	\$	13,000	
2022		TAMA COUNTY	T47: E27 TO HWY 96	\$	1,000,000	
2022		MARSHALL COUNTY	E29 - STORY COUNTY LINE TO HOPKINS AVE	\$	1,500,000	
			TOTAL 2022	\$	2,513,000	
			BALANCE END OF 2022	\$	136,784	
2023	\$ 2.562.000	IOWA's STBG ALLOCATION + 70% IOWA's STBG-TAP-FLEX				
2023	<del>+</del> =,=,	REGION 6	PLAN & PROGRAM	S	20.000	
2023		ALDEN	MAIN STREET	S	198,000	
2020		7120211	TOTAL 2023	\$	218,000	
			BALANCE END OF 2023	\$	2,480,784	
2024	\$ 2,562,000	IOWA's STRC ALLOCAT	ION + 70% IOWA's STBG-TAP-FLEX			
	φ Z,30Z,000	REGION 6	PLAN & PROGRAM	\$	20.000	
2024 2024				-		
		MARSHALLTOWN	HIGHLAND ACRES ROAD	\$	3,900,000	
			TOTAL 2024	S	3.920.000	

REGION 6 TAP OBLIGATIONS & APPROPRIATIONS							
YEAR	REVENUE	PROJECT	EXPENSE				
		BALANCE 2020	\$	774,403			
2021	\$ 162,000	Iowa's TAP 2021 Allocation + 30% Iowa's STBG-TAP-Flex					
		MARSHALLTOWN (IOWA RIVER TRAIL): BRIDGES 2-5	\$	247,500			
		HARDIN COUNTY (IOWA RIVER TRAIL): BRIDGES 19-25	\$	247,500			
		MARSHALL COUNTY (HWY 330 TRAIL): GRAVEL CROSSINGS	\$	144,000			
		HARDIN COUNTY IOWA RIVER TRAIL - PAVE STEAMBOAT					
		ROCK TO ELDORA	\$	145,000			
		MARSHALLTOWN IOWA RIVER TRAIL - BRIDGES 2-5	\$	300,000			
		TOTAL	\$	1,084,000			
		BALANCE 2021	\$	(147,597)			
2022	\$ 162,000	Iowa's TAP 2022 Allocation + 30% Iowa's STBG-TAP-Flex					
		GRINNELL: GART FROM INDUSTRIAL TO STAGECOACH	\$	336,000			
		BALANCE 2022	\$	(321,597)			
2023	\$ 162,000	Iowa's TAP 2022 Allocation + 30% Iowa's STBG-TAP-Flex					
		BALANCE 2023	\$	(159,597)			
2024	\$ 162,000	Iowa's TAP 2022 Allocation + 30% Iowa's STBG-TAP-Flex					
		BALANCE 2024	\$	2,403			

#### CHAPTER 9: PUBLIC INVOLVEMENT PROCESS AND RESULTS

In accordance with Region 6 Resource Partners' Public Participation Plan, this Long-Range Transportation Plan includes input by community members from the Region 6 Counties of Hardin, Marshall, Tama and Poweshiek. Community participation in this process has involved in-person meetings with key government stakeholders across the region, an online survey open to stakeholders and the general public, and a committee meeting with a public hearing. Resource agencies and stakeholder groups including the Iowa Department of Natural Resources, State Historical Preservation Office, area County Conservation Boards, Natural Resource Conservation Services (NRCS), Environmental Protection Agency (EPA), US Fish and Wildlife Services (USFWS), the Meskwaki Tribe, area economic development districts, area counties and cities, and transit service partners were notified of the draft plan and asked to comment.

Public participation was invited through a large e-blast inviting the public to share their feedback in an online survey and providing information about the plan update on the Region 6 Resource Partners website. The public was also notified of public hearings in local newspapers and on the information board at the Region 6 Resource Partners office. Press releases were provided to local radio stations and newspapers to inform the public of the planning effort and chances to participate. Input from all of these activities was assembled and documented by Region 6 Resource Partners staff, and this information was used to develop many of the goals and objectives of this document.

Public input will continue throughout the Long Range Transportation Plan's implementation and revision processes. Public participation will follow the Region 6 Public Participation Plan document to include additional focus group workshops and promotional campaigns. The LRTP document will be available for review at the Region 6 Resource Partners office and online at <a href="https://www.region6resources.org">www.region6resources.org</a>.

#### **Public Participation Survey**

During the months of January and February 2020, a public participation survey was conducted online with Google Forms. A sample of this survey is include in Appendix E. The survey was circulated through a targeted promotional campaign via email and a press release distributed to local media in the four-county region. A story about the survey was written and distributed in the print edition of the Times Republican. The survey announcement was also posted on the Region 6 Resource Partners website and sent out to cities and counties in the region with the request to take the survey. The survey was also available in paper form upon request.

The survey generated 230 responses. The survey was designed to get feedback on how people travel as well as feedback on transportation issues, initiatives and policy priorities. Topics include the condition of roads and bridges, traffic safety issues, commuting alternatives, bicycle lanes, recreation trails, sidewalks, and safe routes to school.

#### **Overall findings include:**

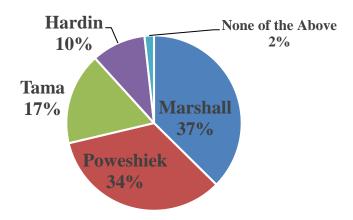
- The majority of respondents expressed that alternative methods of transportation like walking paths, programs for safe walking or biking to school, and multi-use trail were important to them.
- The majority of respondents felt that on-demand taxi service, ride-sharing services, or a service including public transit that provided out-of-town trips to larger nearby cities need was not met.
- Feedback was mixed on adequacy of bride maintenance, state road maintenance, county road maintenance and local road maintenance.

Detailed findings are included in this chapter.

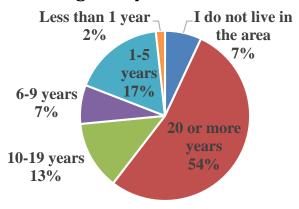
The majority of survey respondents lived and/or worked in Marshall County (37%) followed by Poweshiek County (34%), Tama County (17%) and Hardin County (10%). Survey participation by county follows population patterns in the region. More than half of respondents (54%) have lived in the planning region for 20 years or more – and 77% of respondents describe themselves as living in a town or city, or just adjacent to a town or city. When considering respondents' zip code of home address, the most urban zip codes (and therefore most populated areas) generated the highest response rate. Grinnell (50112 zip code) generated 65 survey results and Marshalltown (zip code 50158) generated 61. Overall, the planning area is very well-represented.

Regarding age, many age groups were well-represented. The largest portion of respondents were between 25 and 44 (35%). Those who are "working age" between 25 and 59 represented 73% of total responses. Those 60 and over made up about  $\frac{1}{4}$  of total responses.

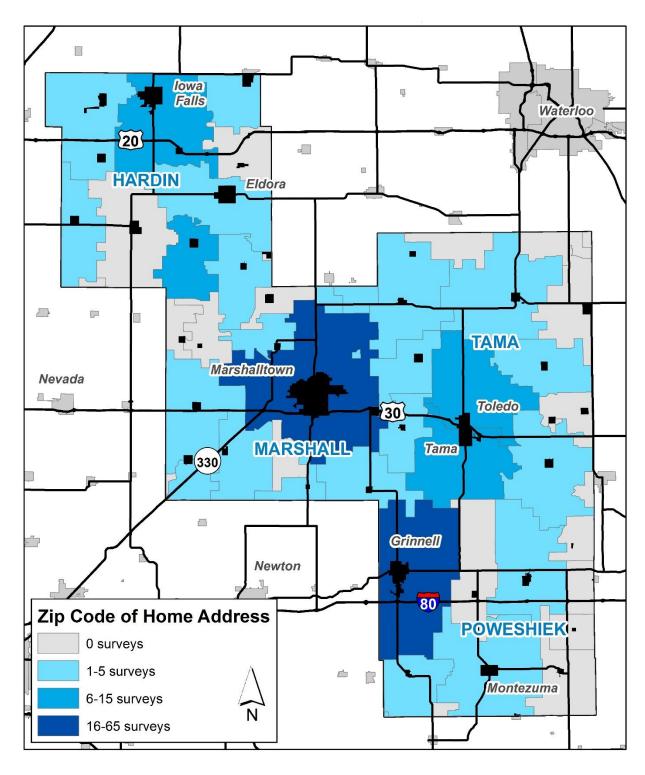
## Which county do you primarily live and/or work?



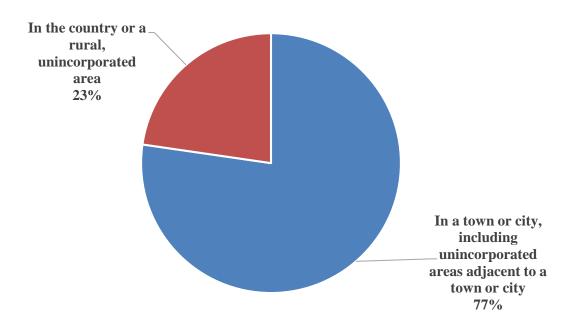
# If you live in the Hardin, Marshall, Poweshiek, or Tama County region, how long have you lived there?



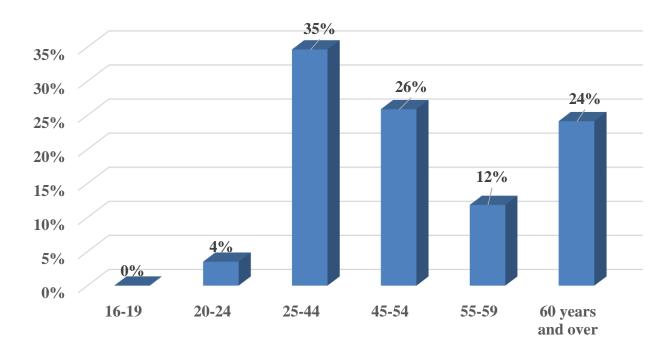
## What is the zip code of your home address?



## Which best describes where you live?



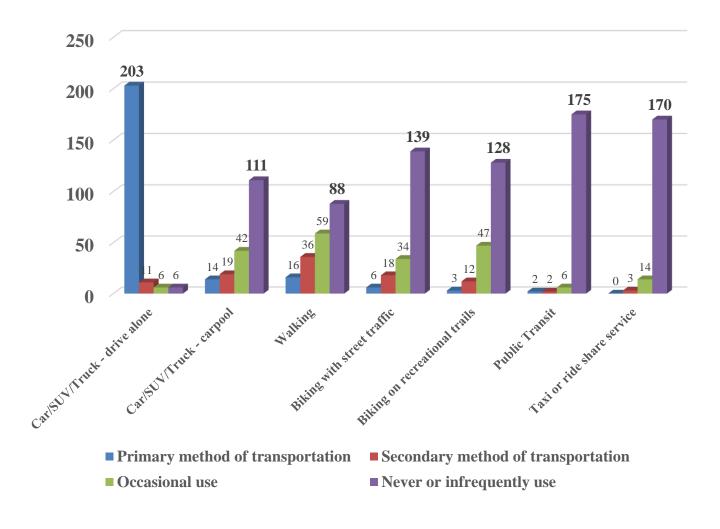
### What is your age?



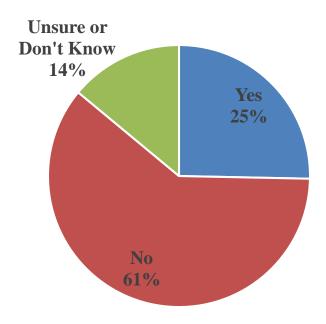
Survey respondents were asked how often they use different forms of transportation, including driving alone, carpooling, walking, biking with street traffic, biking on recreation trails, public transit, and taxi or ride share services. The vast majority of respondents (88%) indicated that driving alone is their primary method of transportation. When asked if they would like to use a different method of transportation than they currently use, 25% said yes. Respondents were not asked what other type of transportation they would like to use.

When asked how far their commute is, 36% of respondents had a commute of 2 miles or less – we can assume that those respondents are working locally. More than half of respondents (63%) had a commute of 10 miles of less. For the remaining respondents, 13% commuted between 11-20 miles, 11% commuted between 21-35 miles, 1% commuted between 36-50 miles, and 4% commuted greater than 50 miles.

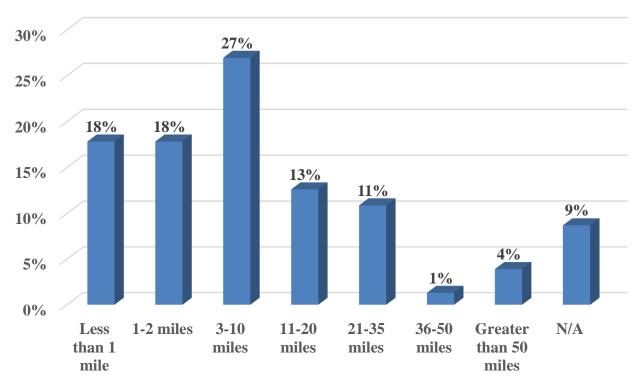
How often do you use the following methods of transportation to get from your home to work, shopping, medical, and leisure destinations? For each transportation method, mark whether it is your, primary method, secondary method, occasional use, or never or infrequent use.



Would you like to use a different method of transportation to reach your destination instead of your current method of transportation?



## How far do you travel to get to your place of employment (one-way)?



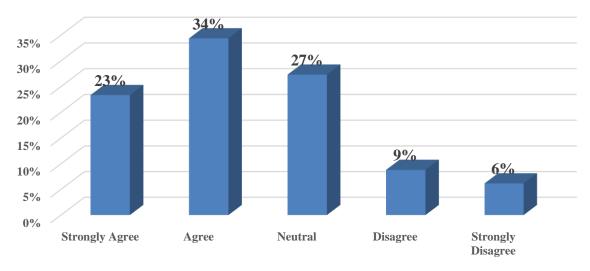
Survey respondents were also asked their opinions about "transportation alternatives" outside of the typical transportation method of driving alone. Topics included the importance of bike lanes, multi-use trails, walking paths, sidewalks, active forms of transportation, safe routes to school, active transportation, carpooling, and employer-focused ride sharing. Results of transportation alternatives are on the following pages. Findings include:

- Walking paths and sidewalks are important to me: 84% strongly agree or agree.
- Region 6 should develop programs for safe walking or biking to school: 78% strongly agree or agree.
- Multi-use trails are important to me: 70% strongly agree or agree.
- Active forms of transportation are important to me: 70% strongly agree or agree.
- Bike lanes are important to me: 57% strongly agree or agree.
- Region 6 should develop programs for shared rides to major employer locations: 53% strongly agree or agree.
- Region 6 should develop programs for carpooling: 37% strongly agree or agree.

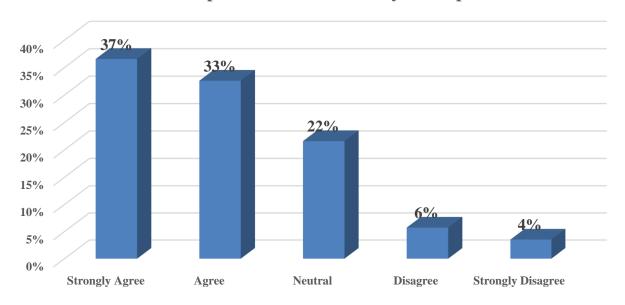
It is important to note that there was very strong support for walking paths, sidewalks, multi-use trails and safe routes for walking or biking to school.

TRANSPORTATION ALTERNATIVES - For the following statements, please mark whether you strongly agree, agree, neutral, disagree, or strongly disagree.

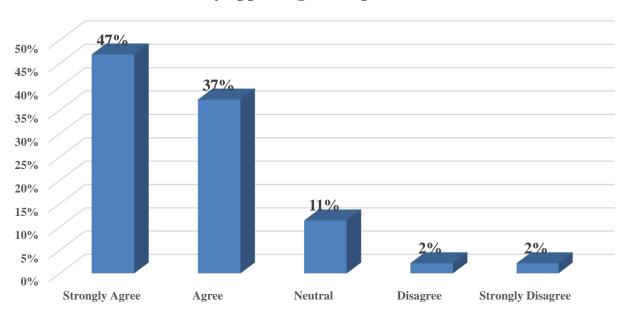
### Bike lanes are important to me.



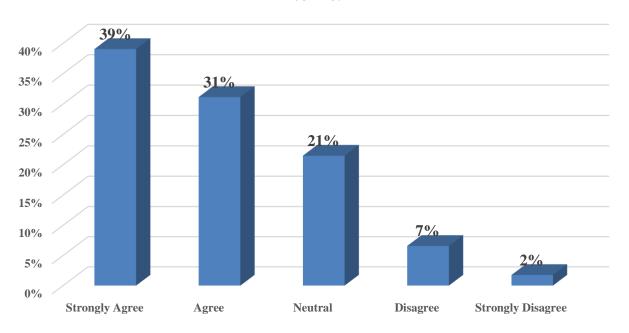
### Multi-use trails separated from a roadway are important to me.



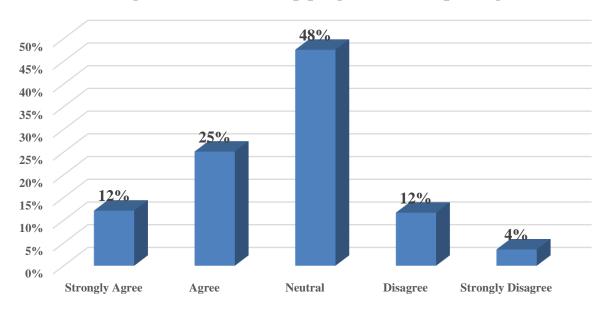
Walking paths and sidewalks that are well-maintained and visually appealing are important to me.



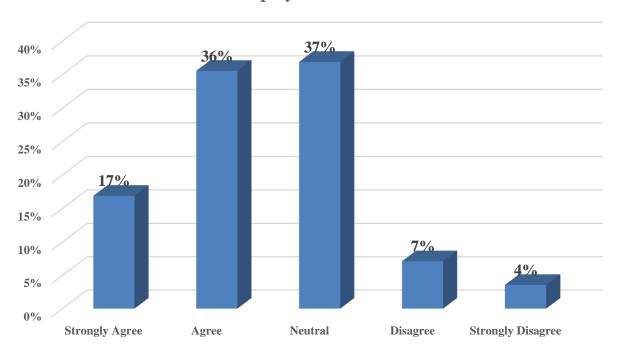
## Active forms of transportation (walking, biking) are important to me.



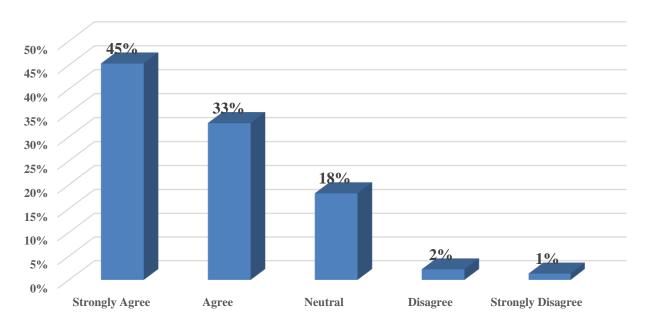
Region 6 should develop programs for carpooling.



Region 6 should develop programs for shared rides to major employer locations.



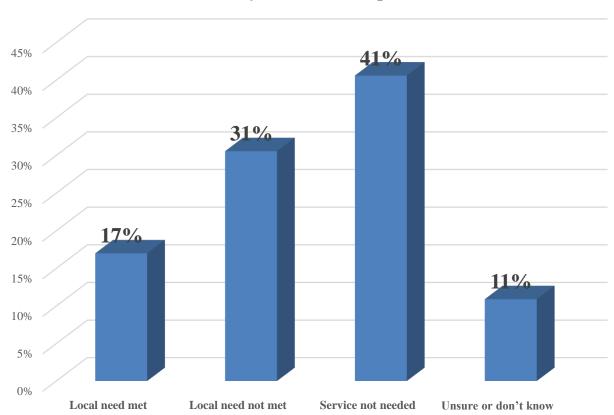
Region 6 should develop programs for safe walking or biking to school.



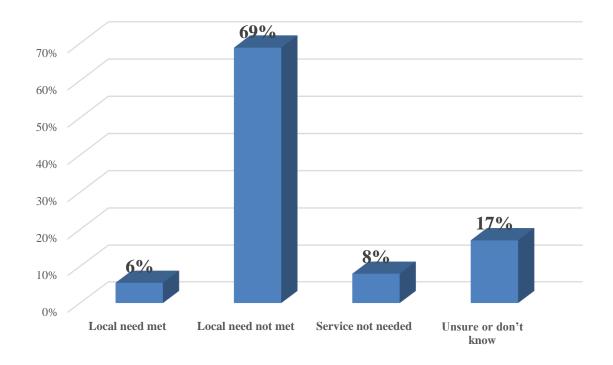
Survey respondents were asked their opinions about how well different forms of passenger transportation and public transit met the needs of their community. In addition to their own needs, respondents were asked to consider how households without a personal vehicle may access grocery, shopping, medical, work, and leisure destinations. Results on these topics are on the following pages. Findings included:

- 31% said existing public transit for in-town trips did not meet local needs, but 41% said the service was not needed
- 69% said local need is not met for public transit or taxis serving out of town trips to larger metro areas
- Findings were mixed about Peoplerides service 24% said local need was met, 28% said local need was not met, and 42% were unsure or didn't know, likely because they were not familiar with the service.
- 52% said on-demand taxi or ride sharing service local need was not met

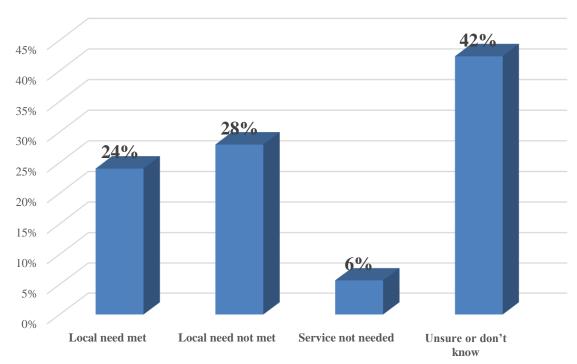
## Existing public transit/taxi - IN TOWN: A fixed route bus service provided daily for in-town trips



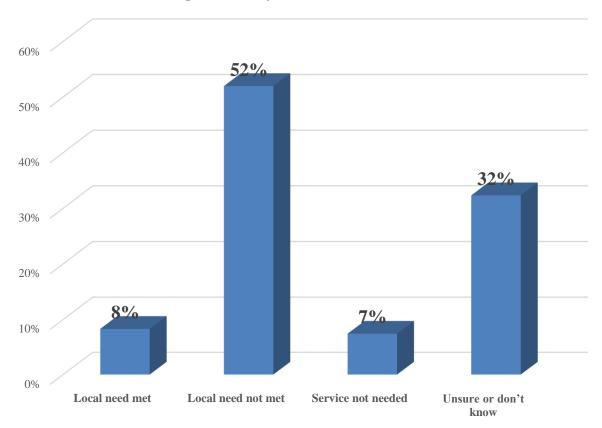
## Existing public transit/taxi - OUT OF TOWN: Bus or other service for destinations out of town to larger metro areas



# Existing public transit/taxi -IN TOWN OR OUT OF TOWN: Peoplerides Public Transit - scheduled 24 hours ahead, service days and hours vary.



Existing public transit/taxi -IN TOWN OR OUT OF TOWN: Taxi service, ride sharing (Uber, Lyft) or other on-demand service

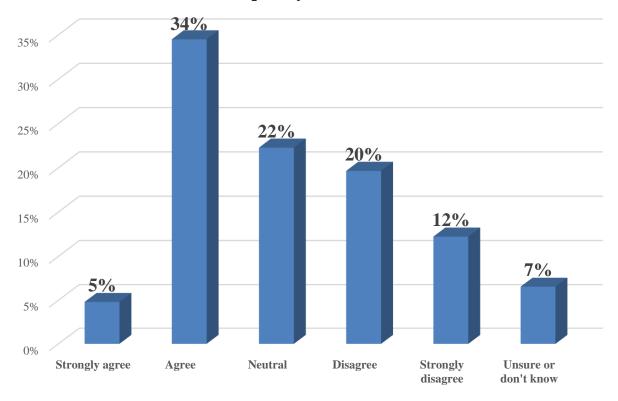


Survey respondents were asked their opinions about maintenance of existing transportation infrastructure, including bridges, state roads, county roads, and city roads. Findings include:

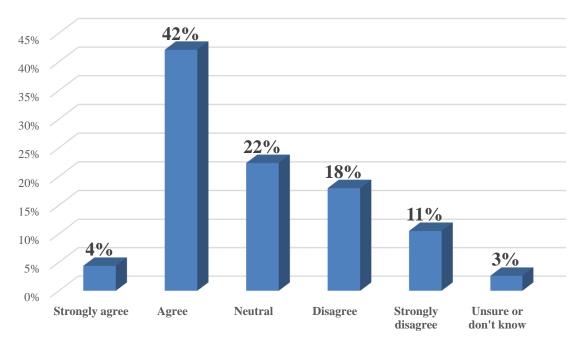
- Bridge maintenance: 39% agreed or strongly agreed that bridges were adequately maintained, while 32% disagreed or strongly disagreed.
- State road maintenance: 46% agreed or strongly agreed that state roads were adequately maintained, while 29% disagreed or strongly disagreed.
- County road maintenance: 45% agreed or strongly agreed that county roads were adequately maintained, while 44% disagreed or strongly disagreed.
- City road maintenance: 34% agreed or strongly agreed that city roads were adequately maintained, while 47% disagreed or strongly disagreed.

In particular, larger amounts of respondents identified county and city roads as not being adequately maintained than other maintenance issues. Based on the write-in comments, these feelings often relate to snow removal and winter weather conditions. For gravel county roads, some respondents commented that roads needed more maintenance, especially during the freeze/thaw periods of the year.

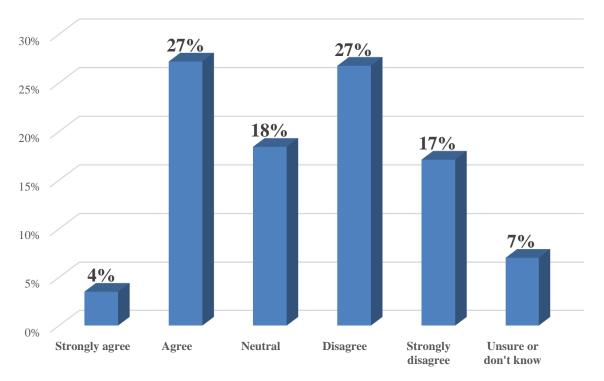
**EXISTING BRIDGES Existing bridges (state, county, and city) are adequately maintained.** 



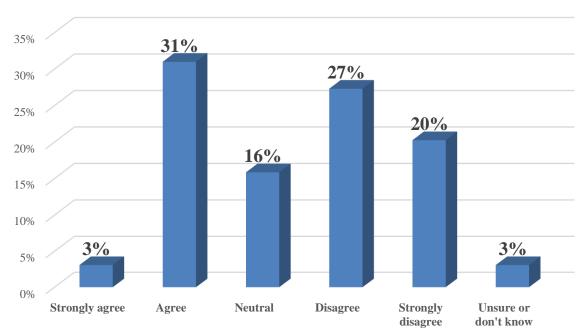
### **EXISTING ROADS:** Existing state roads are adequately maintained.



## **EXISTING ROADS:** Existing county roads are adequately maintained.



### **EXISTING ROADS:** Existing city local roads are adequately maintained.



A final question asked respondents to rank transportation priorities on importance while "keeping in mind transportation funds are limited." Respondents ranked the following transportation issues highest as "very important" or "important":

• Maintain/improve existing road and bridge system: 85.27%

Safe routes to school: 79.01%Improve road safety: 77.13%

• Maintain/improve sidewalks: 68.64%

• Offer more public transit for elderly/disabled: 68.22%

• Expand public transit: 56.45%

Build multi-use recreation trails: 42.60%
Build bike lanes along roads: 36.88%
Maintain/improve railway: 30.81%

• Carpool/vanpool: 28.13%

• Maintain/improve airports: 19.11%

Keeping in mind transportation funds are limited, please mark with an "x" whether you feel each transportation option is very important, important, neutral, somewhat important, or not important.

						Unsure
	Very			Somewhat	Not	or don't
	important	Important	Neutral	important	important	know
Maintain and improve						
existing road system						
and bridges	42.86%	42.41%	9.82%	2.68%	0.89%	1.34%
Maintain and improve						
sidewalks	26.69%	41.95%	18.22%	11.02%	0.85%	1.27%
Improve road safety	31.39%	45.74%	16.14%	5.38%	0.45%	0.90%
Build bike lanes along						
roads	12.44%	24.44%	24.00%	18.22%	19.56%	1.33%
Build multi-use						
recreation trails	16.59%	26.01%	24.66%	17.04%	14.35%	1.35%
Fund safe routes to						
school projects -						
walkability	37.05%	41.96%	10.71%	7.14%	1.79%	1.34%
Expand public transit						
service	25.78%	30.67%	22.22%	9.78%	8.44%	3.11%
Offer more transit						
services for elderly and						
disabled	30.08%	38.14%	16.95%	8.05%	1.69%	5.08%
Create carpool/vanpool						
programs	8.04%	20.09%	40.18%	13.84%	12.50%	5.36%
Maintain and improve						
airports	2.67%	16.44%	37.33%	14.67%	20.44%	8.44%
Maintain and improve						
railway system	8.93%	21.88%	31.25%	12.95%	16.07%	8.93%

Maintain/improve the existing road system rose to the top in terms of importance to respondents. Even with the consideration of limited transportation funds, respondents still identified safe routes to school and maintaining/improving sidewalks as high on the priority list.

The survey contained a write-in question where respondents could comment on issues that there important to them. Comments have been arranged by county, and then by broad topic on the following pages.

### **Survey Write-in Comments**

Are there issues you face when traveling in the Region 6 area? We want to know! Please tell us where you have experienced safety issues, roadway congestion, connectivity issues while traveling in Hardin Marshall, Poweshiek or Tama Counties. You can also describe where bicycle and pedestrian issues exists, or where you wish you could walk or bike. Describe the location and concern below:

#### **Hardin County Comments**

There were 23 total survey responses from Hardin County but 16 were blank or wrote "none" for the write-in question. Write-in comments from Hardin County residents are below:

- Blocked railroad crossings in Ackley and Iowa Falls. No taxi/ride services available for those who do not drive and need to go to appointments out of town.
- No bus, too far to bike between towns/cities. It is too difficult for those who cannot afford a car to drive, thus very limited to no job opportunities, thus unemployed and furthering not able to purchase a vehicle to work.
- No convenient, affordable public transportation in Hardin County at all.
- Highways leaving our town are too narrow to feel safe riding a bicycle on them. There are no bike lanes. The back highway from Ackley to Iowa Falls has a horrible railroad track crossing. Very hard on a vehicle if you cross it going much over 30 mph.
- Construction on Highway 175.
- Only poor maintenance of gravel roads.
- Live in Hardin and drive to Marshall each day. I car pool with one person. No concerns.

#### **Marshall County Comments**

There were 86 total survey responses from Marshall County but 47 were blank or wrote "none" for the write-in question. Write-in comments from Marshall County residents are below:

#### Sidewalks, Pedestrian Traffic, Biking and Recreational Trails

- More sidewalks to make walking/biking places for recreation more accessible
- Along Governor Rd and Olive there is always a lot of pedestrian traffic and no sides walks. Gets to be a little crazy when Lennox/Fisher/Emerson let out.
- Could use more sidewalks
- Need more sidewalks

- At the edge of our city, there are no sidewalks to access facilities that are actually walking distance, or to walk recreationally. The bike/walking trail has inadequate access so I must walk on people's property to get to the trail.
- Marion street from 3rd ave to 18th ave, and 18th ave from the industry there to the rail
  road bridge lack sidewalks. People walk to work on these streets, often in the dark and
  wearing dark clothing, making them difficult to see and creating an unsafe environment for
  all involved.
- Wish I could bike on recreational trail from Marshalltown to Steamboat Rock and farther north
- Would like to ride recreational bike trail from Marshalltown to trail connection in Baxter and or Rhodes to connect to Des Moines trails.
- There needs to be no money put into bike paths, this land needs to back to farmers so they can produce products to feed the world. More money for farm to market roads. The Marietta (hwy 330) needs to have a shoulder on it so farm machinery can go down 2 miles without having problems with traffic. Someone will be getting killed as crazy as the drivers are that drive on 330.
- Improve condition of Linn Creek Recreational Trail
- Counties could use more bike trails connecting communities for leisure and work travel.
- It is difficult to cross the railroad tracks at 12th Street or 6th Street in Marshalltown to get to additional bike trails.
- I have tried bicycle commuting but there is no way to get anywhere (Marshalltown, Conrad, Gladbrook, Garwin) without traveling on Wallace Ave., Hwy 96, or Hwy 14 which have to much traffic, to narrow of shoulders, and to steep of ditches to be safe. Ride 160th between Hwy. 14 & Wallace for exercise or drive somewhere to ride trails. A bicycle friendly way to cross the Iowa river into Marshalltown would be awesome! I also have a horse I trailer to Grammer Grove to ride. Do ride on gravel but people are idiots when they drive out there. After someone comes over a hill doing 50mph and you jump in the ditch a few times it puts you off road rides. More trails for non-motorized users of all kinds!! (especially if they go somewhere.)
- WEST LINCOLNWAY IN MARSHALLTOWN NEEDS A BIKE -WALKING PATH BECAUSE THERE IS NO SIDE CONNECTING STREETS TO USE AND ALL RAILROAD CROSSINGS IN MARSHALLTOWN ARE VERY UNSAFE FOR BICYCLE OR PEDESTRIANS TRAFFIC
- Safe walking or biking on significant roadways--in Marshalltown this includes Lincoln Way and Iowa Ave.
- Highway 14 from Newton to Marshalltown is now pretty good. It would be nice if the shoulder was paved wide enough for bicycle use all the way, but I don't know if I would bicycle on it much.
- Concerned about the lack of attention automobiles give bicycles when on the bike path and cross the traffic with the light, and cross entrances and exits to businesses.
- Riding a bike on streets is very dangerous. Car drivers can even be aggressive to bikes.
- Concerned about cars that stop at lights beyond the stop line making it difficult for pedestrians and people with accessibility needs to walk in the crosswalk.
- I'm older and have no desire to use bike.

#### Vehicle Movement and Safety Concerns

- Lack of speed control during night driving. Very little police coverage at these time.
- Entering 18th Ave from Olive or Anson Street is very dangerous.
- Marshalltown --- S. 3rd St. and Madison street intersection, congestion

- Concerned about left turn traffic and traffic flow on Highway 14 in Marshalltown on South Center Street from Iowa Avenue to south city limit line.
- Concerned about cars that cut through residential neighborhoods at higher speeds and pass cars going the speed limit, such as Edgebrook Drive in Marshalltown.
- See serious traffic violations every time I drive. Mostly speeding. My street has 25 mph posted and vehicles go 50 mph everyday and all day. Shouldn't be semis on my street. It is in bad condition and narrow. The trucks speed too. Should be designated truck routes. I take 12th Ave. to Iowa Ave. East. I work on Iowa Ave. West. People accelerate at a high rate of speed toward edge of town. I have witnessed accidents of drivers passing on Iowa Ave. West. Should be no passing zone. Local police and city refuse to park in these areas to ticket offenders. Maybe drive by once a day. That won't cure problem. I have to be extremely vigil for people who run lights, stop signs and refuse to use turn signals. I lived in Des Moines and Marshall County, including city of Marshalltown, is far worse. We need more patrolmen and STOP signs. Too many streets with no stops so drivers go twice speed limit with no consequences. I have seen little girls almost run down by speeding cars. Police don't care. No response.
- Frequently travel between Marshalltown and Garwin on the Garwin Road. This road is too narrow, no shoulders in Marshall County. Bicyclists use the road, mainly spring and summer, which can be hazardous. In Marshalltown, Lincoln Way is very rough from about 9th Street west to about Lincoln Tower Apartments. I feel 3rd Avenue should be left 4 lane through town.

#### Maintenance and Repair

- City roads are never plowed
- Snow removal in Marshall County is poor quality compare to other communities.
- Muddy roads...snow drifts...need more horse trails...
- Highway 30 at Dillon Road (going East Bound) is a trouble spot with the downhill & blowing snow. In Feb of 2019 it could have used a little more attention.
- I encountered poor road conditions during winter weather. Usually in the area on Hwy 14 or some of the more county roads near my home
- Normal winter travel
- My main concern is the potholes in the spring. There are many streets in Marshalltown that need resurfacing.
- Please pave all of Dillon Road in Marshall County
- Roads are in need of repair. State Center roads and some rural roads.
- Our gravel roads and bridges, designed and constructed nearly a century ago, are not capable of handling the traffic today. We are witnessing the progressive failure of this infrastructure year after year.
- Marshall Jasper County line road often poorly maintained
- Hwy 14 north of Marshalltown to intersection of Hwy 175 REALLY needs completely redone.
- Construction and detours.

#### **Transportation**

- Transportation for parents with young kids. especially in rural areas
- Not having drivers available for afternoon appointments when they are out of town for residents that live in long term care facilities. Not enough drivers at People Rides, have to use out of town services that are extremely expensive.

- Allowing Uber and Uber eats should be looked into. Moving from Chicago it is a huge culture shock that you can't just order restaurant delivery or just get an uber home.
- Marshalltown Bus System seems complicated, and I'm a smart person!

#### **Poweshiek County Comments**

There were 78 total survey responses from Poweshiek County but 37 were blank or wrote "none" for the write-in question. Write-in comments from Poweshiek County residents are below:

#### Sidewalks, Pedestrian Traffic, Biking and Recreational Trails

- Not complete sidewalks to walk or ride on throughout town. More bike lanes or wider shoulders
- Lack of sidewalks on many streets in Grinnell
- There are a lack of sidewalks in town, meaning many bicycles need to use road space
- The sidewalks aren't always safe and the laws for biking on streets and sidewalks are complicated and it becomes an accessibility issue when it is cold and windy.
- The bigger stores in our town have only one very specific route to get to them via biking or walking. You have to go out of your way, across a busy road with no nearby light, to get to a path.
- there is no easy way to walk on highway 6 or 146 because there are no sidewalks and the gravel sides are often muddy or snowy
- Biking is dangerous on Highway 146, which is what I use to get to Grinnell.
- It would be great if we have bike path options to get you around town and connect to other bike paths in the area. Safe travel is key. We have one main option moderate to high degree of difficulty.
- As an avid cyclist I ride all paved county roads in the Region 6 area often. Roads with wide shoulders with out rumble strips are greatly appreciated and create a safer place for bicyclists and cars. Also wider shoulders would create a safer place for emergency issues for all vehicles.
- Motorists use cell phones when they should be driving, making it unsafe to ride a bicycle or walk. No proper/useful bike lanes. Not enough sidewalks, sidewalks are in disrepair, or no crosswalk signals, motorists do not yield to pedestrians.
- I would like to bike more to work (Grinnell College), for running errands and on recreational trails. Most often, my family goes to other counties for recreational riding since the Rock Creek path is so hilly. I would feel safer if there were designated bike lanes (with painted lines) and bike route signs on 8th, 10th and 11th Avenues and Park St. to cue drivers to be aware of bikers. I am willing to take alternate routes if other bike routes to the College, down town, or to the schools are established.
- Phone connectivity in valleys from Poweshiek to Marshall County. We wish we could bike around Lake Ponderosa.
- Pedestrian issues at the highway crossing in Brooklyn from Bear Creek drive to Ball fields when busy
- sidewalks and roads are excellent. I would like to see increased bike lanes in town, and increased bike racks in the down town area. I would also like to see increased bike paths for recreational use in and around our community.
- Primary safety issue is bike and pedestrian access to our local schools. There is very little safe bicycling to our schools (no bike lanes) and limited sidewalks as well.

- Crossing 6th Avenue in Grinnell on bike is difficult unless you cross at a light. in a car, the lights on 146 in Grinnell are never synced, which is so frustrating. 16th Avenue in Grinnell east of 146 is cambered so steeply sometimes i fear one car is going to roll into the ditch when cars are crossing.
- I do not feel like cars give adequate room to cyclists. I have been passed in intersections and had to come to screeching halt so that oncoming traffic and the passing truck occasionally auto) do not collide. I am conscientious when it comes to signaling, but trucks are still likely to ignore my signal and/or ignore yield signs.
- I always think we can use more bike trails, as an avid biker the more ways we can encourage folks to bike/walk places the better.
- I would like to see safe bike routes that allow them to travel away from cars (not bike lanes next to cars). Cars and bikes don't mix well, even when everyone is trying to be safe. Just biking around and through the city of Grinnell can be problematic along busy streets. Can't have kids bike to school because East, West, 8th too busy. Also, congestion around schools in AM/PM is dangerous for children and everyone else walking, biking, or driving.
- I wish there were more bike paths in Grinnell!
- Road conditions are rough and sometimes difficult to navigate with a bike in Poweshiek.
- Walking seems to be becoming more dangerous/difficult simply because traffic speed enforcement is pretty non-existent in Grinnell. People are usually racing around at 50 mph in their SUVs.

#### Vehicle Movement and Safety Concerns

- Many people, including my wife and I, have gotten flat tires on Hwy 63 north of Grinnell from nails on the roadway.
- The stoplights in Grinnell are not in sync. You end up getting stopped just one or two blocks after your first light turns green. I always take the side roads because it is too congested and takes too long to deal with the lights.
- The corner of Reed ST and 6th Ave in Grinnell. It needs a stoplight.
- Congestion during school hours for turning traffic at Hwy 146 and 11th Ave in Grinnell. Also, it is extremely hazardous driving in wet night time conditions, or snow-covered roadway because of a new but poorly designed, constructed and marked turn lane near Grinnell Re-insurance south of Grinnell on Hwy 146 (the main traffic flow bends left and right, but you are unable to see any lane strippings or shoulder markings).
- Only travel to Poweshiek to work. No significant issues.

#### Maintenance and Repair

- Poor road gravel and Highway No up keep
- Pot holes and torn up streets in residential areas roads need fixed!!! This is especially true on the North-West side of town in Grinnell, IA
- Just the weather. But that is just in the winter. Some of the gravel roads are not maintained.
- So many of the side roads in Grinnell are awful!
- Grinnell's roads are awful--pot holes, uneven, cracks, poor resurfacing. my bike tires ruptured last fall on recently asphalt "resurfaced" roads-- the TIRES, not the tubes. I am disgusted that our town has signs suggesting we have 43 restaurants when the roads to access them are in such bad shape. shame on Grinnell. also, no one makes a proper left turn when driving and inevitably drive in oncoming traffic lanes because they are too lazy to make a complete turn. I can't believe how stressful it is to walk or bike three blocks in this town

- In winter driving conditions, Highway 6 isn't typically cleaned UNTIL I get to the Malcom exit? Why is this?
- No issues except poor farm to market street condition.

## **Transportation**

- I am in my70's--as I get older I would expect to drive less
- I don't drive and it would be nice to have transportation on very cold days to get my groceries or doctor appointment and such
- Limited hours, not able to use public transportation when I need it due to scheduling issues with region 6.
- I would like more extensive public transportation, especially across long distances throughout the state. I do not have a car, and I live in a very small town. It's very difficult when I need to go to other towns and cities in order to see my specialist doctor or buy something specific.
- More access to Peoplerides: access to more than just availability with 24 hour notice. Daily & evening access for Grinnell. Having travel access to live life as others do by going to & from: stores, restaurants, movies, community events, sporting events, church, post office, doctor-dental-mental health appts, urgent care, banks, etc... Providing this would help folks engage with their community instead of feeling isolated during certain hours. Plus make the community more attractive to folks looking to stay in their communities or move to one. Flooding of roads causing lengthy detours. Residential streets in dire need of repair & resurfacing.
- I do not see anywhere this is relevant in this survey, but what is needed is (free?) transportation to and from the local food bank. I am the director of the food pantry in Montezuma and it is difficult for many clients to get food. We send them home with about 100 pounds of food, but they cannot travel home with it. If the come from Grinnell to get food with a neighbor, their neighbors often want a portion of their food or cash for driving them to the pantry.

## **Tama County Comments**

There were 39 total survey responses from Tama County but 21 were blank or wrote "none" for the write-in question. Write-in comments from Tama County residents are below:

## Sidewalks, Pedestrian Traffic, Biking and Recreational Trails

- I wish I could bike from Marshalltown to Albion or to Bondurant.
- Walking and bicycles are not safe alternatives in Tama Toledo need separation from vehicles. Young people are particularly at risk as pedestrians near the South Tama High School crossing Hwy 63. We need a pedestrian overpass.
- Traffic and pedestrian issues in of the STC High School during beginning and ending of the school day. There are apartments and a nursing home across the street that have traffic turning in and out. This is not a safe area. Children going to school also trying to cross that highway. There needs to be a traffic light for those times during the day with a crossing area. It is very unsafe the way that it is.
- Highway 63 within the Toledo, IA city limits but adjacent to Tama, IA city limit no sidewalk
- Lack of recreation and safe walking and biking in Tama County in general. Otter Creek Lake is a desirable location, but safety on Highway 63 N is a concern. Lack of pedestrian and recreation through town is a concern also no safety measures for pedestrians directly in

front of STC High School or to get from one side of town to the other (and to-from downtown areas - Tama to Toledo, etc.)

## Maintenance and Repair

- There is a place 1 mile outside Gladbrook (East) where a bridge has been closed. We have had to drive as many as 4 miles out of our way to access that area because of the closure. There are people who live right next to the bridge who always have to drive at least 2 miles out of their way because of it.
- Improve US 63 south of Tama to US hwy 6
- Snow removal, Getting gravel on the roads
- WEATHER RELATED ISSUES
- County road care is poor
- We no longer farm so I cannot voice experience with this. Our gravel roads must be given priority attention now.
- For at least the last two years, our rural roads have been gravely neglected. If I were a county official, I would be demanding an investigation! Our taxes are supposed to help with the cost of maintaining our roads. What happened?! There has not been a full gravel dump on the road we live on for more than two years. The consequences have really hit us hard. I am disabled and count on the school bus to pick my son up for school and drop him off. These are two of the times that I must administer my medication so this literally has impacted my health and our lives. For almost all of the fall and winter months last year, buses were hard surface only. For us, that means driving seven miles to catch the bus! We are only 1.1 miles from pavement, however on "hard surface" days, T47 is not considered safe for buses to travel on.

## Vehicle Movement and Safety Concerns

- Congestion and safety issues at the STC high school intersection
- Often traffic congestion at corner of Wallace Ave and 96.
- My main issues are deer darting in front of me on the way to work
- Poor road conditions; distracted and/or aggressive drivers
- I drive on the main highway through Tama County and see no big issues or even minor issues.
- There are four areas of concern that our family experiences. The first is regarding Highway 30. In the past three years, I have encountered five vehicles traveling in the wrong direction (driving east in the westbound lanes or vice versa). All of these occurred at night in Marshall and Tama Counties and two of them forced me off the highway. I do not know of a solution to this but something has to be done. The second and third areas of concern pertain to highways and roads in general. Driving at night can be difficult for some people, especially when the roads are wet or icy. Their difficulties can be greater when oncoming vehicles have the newest LED lighting. Far too often I have seen vehicles that have converted to LED lights (as opposed to newer vehicles that come standard with LED lights) without properly leveling their lighted path. This can cause momentary optical hindrances similar to the flashbulb in a camera flashing in a persons face. This can occur at close range as well as far distances. Again, I do not know of a solution, but it has been an issue for me. Additionally, I just have to ask - why doesn't Iowa DOT use reflective paint on the roadways? Wet or snow covered roads REALLY make it difficult to navigate lessor traveled roads, such as T47 in Tama, and even the city streets throughout all our counties. Even using reflective paint on the center line would give a reference point. Roads such as T47 with constant hills, absolutely NO shoulder when snow is falling and/or blowing can be terrifying.

#### **Transportation**

- No public transportation available
- Would like to see more options for older adults who are unable to drive themselves to appointments

## Comments from Survey Respondents Who Do Not Live in the Area

There were 4 total survey respondents who were not residents of the Region 6 area but travel in the area regularly. Write-in comments from 3 of these respondents are below (one did not write in comments):

- Currently use DART Rideshare, which is great, but it would be nice to have more participants and alternate schedules.
- Road hazards...weather issues.
- I live within 1/4 mile of Tama County and frequently use Tama County roads to access hard surface roads. The rural gravel roads are agriculture's farm to market access and are in desperate need of gravel. The maintenance personnel do the best they can with their equipment, but when it rains, these "gravel roads" turn to mud and are impassible. Some farmers have resorted to purchasing gravel and apply it to the areas where they live. These individuals pay taxes but are ignored when service is required on their roads. Last summer, an individual in a car became stuck in a muddy low spot and requested assist to get his vehicle out. Surely this need surpasses the need for additional bike or walking paths. Please! Make providing gravel to these roads a priority!

## CHAPTER 10: PLAN EVALUATION AND MAINTENANCE

## Accessibility of the Region 6 Long Range Transportation Plan

A copy of the Region 6 Long Range Transportation Plan will be kept for public review in the Region 6 Resource Partners office and will be posted on the Region 6 web site at <a href="https://www.region6resources.org">www.region6resources.org</a>. Copies of the Region 6 LRTP will also be distributed to the offices of county supervisors and county engineers.

#### Plan Evaluation

The LRTP will be evaluated by reviewing the progress of action items annually and ensuring that priorities remain consistent with feedback received from community members. In order to ensure that the Region 6 Long Range Transportation Plan remains a relevant document that is responsive to the shifting challenges and opportunities in the region, the Region 6 Policy Board will evaluate annually the goals, objectives, and action plans for vital projects. This will be a public meeting, and a written report will be provided to Region 6 counties, cities, and the public through the Region 6 Resource Partners website.

Monitoring the progress in the implementation of this LRTP will be the responsibility of Region 6 Resource Partners staff with guidance from the policy board. Evaluating the effectiveness of the strategies and preparation of an evaluation document will also be accomplished by the Commission staff.

#### **Review and Amendments**

It will be the responsibility of Region 6 staff to bring the LRTP to the attention of the Region 6 executive board and technical committees for review and comment on a biannual basis during which amendments may be made for unique circumstances and/or additional projects that significantly impact the funding outlined in the LRTP. Process of amendments are identified in the Public Participation Plan. The LRTP will be updated in five years.

## **Incorporation of All Transportation Modes**

Region 6 Resource Partners strives to work with all modes of transportation to develop the best possible regional transportation system. The following activities regularly occur to incorporate all modes into long-range planning efforts:

- Discussions with consumers of all regional transportation modes;
- Participation in key policy decisions by representatives of all transportation modes;
- Advocacy for the needs of the population who lack the ability or opportunity to drive; and
- Ongoing dialogue with citizens and public health and human service agencies.

This Plan also includes engineering and design improvements for safer streets and highways. All modes of transportation must work in conjunction with each other to provide the safest, most efficient, and convenient transportation network possible.

# **Appendix A - Largest Employers in Region By Class**

Business	City	Size Class	Industry
Lennox Industries	Marshalltown	1000-4999	Wholesale trade
Fisher Controls	Marshalltown	1000-4999	Manufacturing
JBS	Marshalltown	1000-4999	Manufacturing
JBS Livestock Buying Office	Marshalltown	1000-4999	Manufacturing
Jbs USA Purchasing	Marshalltown	1000-4999	Admin and waste services
Grinnell College	Grinnell	500-999	Educational services
Grinnell College	Grinnell	500-999	Arts entertainment and recreation
Grinnell Mutual Reinsurance	Grinnell	500-999	Finance and reinsurance
Mmsc Foundation	Marshalltown	500-999	Health care and social assistance
Veterans Home	Marshalltown	500-999	Health care and social assistance
Jeld-Wen Door Systems	Grinnell	250-499	Retail Trade
Jeld-Wen Window Div	Grinnell	250-499	Retail Trade
Grinnell Regional Medical Ctr	Grinnell	250-499	Health care and social assistance
Emerson Automation Solutions	Marshalltown	250-499	Wholesale trade
Hv-Vee	Marshalltown	250-499	Retail Trade
Walmart Supercenter	Marshalltown	250-499	Retail Trade
Iowa Valley Continuing Edu	Marshalltown	250-499	Educational services
Unitypoint Health-Marshalltown	Marshalltown	250-499	Health care and social assistance
Brownells Inc	Montezuma	250-499	Retail Trade
Montezuma Manufacturing Inc	Montezuma	250-499	Manufacturing
Meskwaki Bingo Casino Hotel	Tama	250-499	Arts entertainment and recreation
Presbyterian Village	Acklev	100-249	Health care and social assistance
Presbytenan Village Brooklyn-Guernsey-Bgm High	Brooklyn	100-249	Educational services
	Eldora	100-249	Wholesale trade
Remington Seeds LLC Winfield United	Eldora	100-249	Wholesale trade Wholesale trade
Eldora-New Providence Cmnty	Eldora Eldora	100-249 100-249	Educational services Educational services
State Training School			
GMG School	Garwin Grinnell	100-249 100-249	Educational services Retail Trade
Hy-Vee			
Jeld-Wen Windows & Doors	Grinnell	100-249	Retail Trade
Walmart Supercenter	Grinnell	100-249	Retail Trade
ASI Signage Innovations	Grinnell	100-249	Manufacturing
Donaldson Co	Grinnell	100-249	Manufacturing
Engineered Plastic Compone	Grinnell	100-249	Manufacturing
Mayflower Community	Grinnell	100-249	Health care and social assistance
St Francis Manor	Grinnell	100-249	Health care and social assistance
Iowa Prestressed Concrete Inc	Iowa Falls	100-249	Wholesale trade
Hy-Vee	Iowa Falls	100-249	Retail Trade
Walmart	Iowa Falls	100-249	Retail Trade
Buena Vista University	Iowa Falls	100-249	Educational services
Hansen Family Hospital	Iowa Falls	100-249	Health care and social assistance
Scenic Living Communities	Iowa Falls	100-249	Health care and social assistance
Emerson Automation Solutions	Marshalltown	100-249	Wholesale trade
Marshalltown Human Resour	Marshalltown	100-249	Public Administration
MIW Inc	Marshalltown	100-249	Manufacturing
Area Education Agency	Marshalltown	100-249	Educational services
Lenihan Intermediate School	Marshalltown	100-249	Educational services
Marshalltown High School	Marshalltown	100-249	Educational services
Miller Middle School	Marshalltown	100-249	Educational services
Grandview Heights Rehab-Hlt	Marshalltown	100-249	Health care and social assistance
Villa Del Sol	Marshalltown	100-249	Health care and social assistance
Wolfe Eye Clinic	Marshalltown	100-249	Health care and social assistance
PSSI	Marshalltown	100-249	Admin and waste services
West Marshall High School	State Center	100-249	Educational services
Iowa Premium Beef LLC	Tama	100-249	Wholesale trade
Tama Paperboard	Tama	100-249	Manufacturing
Agwsr Community School Dist	Ackley	50-99	Educational services
Raymon-Donco	Albion	50-99	Manufacturing
Brooklyn Community Estates		50-99	Health care and social assistance
Manatts Inc	Brooklyn Brooklyn	50-99	Construction
	Deep River		
Pepsi Beverages Co		50-99	Wholesale trade
Union Middle School	Dysart	50-99	Educational services
Hy-Vee	Eldora	50-99	Retail Trade
Quality Products Inc	Eldora	50-99	Manufacturing
Valley View Specialty Care	Eldora	50-99	Other services excluding public admin
Whink Products Co	Eldora	50-99	Other services excluding public admin
Eldora-New Providence School	Eldora	50-99	Educational services
South Hardin High School	Eldora	50-99	Educational services
Eldora Nursing & Rehab Ctr	Eldora	50-99	Health care and social assistance

Business	City	Size Class	Industry
Greenbelt Homecare Hardin	Eldora	50-99	Health care and social assistance
Swift Greenhouses Inc	Gilman	50-99	Ag hunting and fishing
Westbrook Acres Nursing Ho	Gladbrook	50-99	Health care and social assistance
H W Brand	Grinnell	50-99	Wholesale trade
New Century FS Inc	Grinnell	50-99	Wholesale trade
Fareway	Grinnell	50-99	Retail Trade
Fareway Participal Plans	Grinnell	50-99	Retail Trade
Pagliai's Pizza Miraco	Grinnell Grinnell	50-99	Accommodations and Food service
Uncle Bill's Farm	Grinnell	50-99 50-99	Manufacturing As harding
Davis Elementary School	Grinnell	50-99	Ag hunting and fishing Educational services
Grinnell Middle School	Grinnell	50-99	Educational services
Grinnell Health Care Ctr	Grinnell	50-99	Health care and social assistance
Grinnell College	Grinnell	50-99	Admin and waste services
G F Lacaeyse Transport Inc	Grinnell	50-99	Prof scientific technical
Hubbard Care Ctr	Hubbard	50-99	Health care and social assistance
Fareway	Iowa Falls	50-99	Retail Trade
Times Citizen Communications	Iowa Falls	50-99	Retail Trade
Mc Donald's	Iowa Falls	50-99	Accommodations and Food service
Plastic Recycling-Iowa Falls	Iowa Falls	50-99	Manufacturing
Heritage Care Ctr	Iowa Falls	50-99	Health care and social assistance
East Marshall Elementary Sch	Laurel	50-99	Educational services
Fremont Farms of Iowa	Malcom	50-99	Wholesale trade
Pepsi Beverages Co	Marshalltown	50-99	Wholesale trade
Ryerson Inc	Marshalltown	50-99	Wholesale trade
Fareway	Marshalltown	50-99	Retail Trade
Hy-Vee Drugstore	Marshalltown	50-99	Retail Trade
JC Penney	Marshalltown	50-99	Retail Trade
Marshalltown Schools Food S	Marshalltown	50-99	Retail Trade
Menards	Marshalltown	50-99	Retail Trade
Theisen's Tire-Svc Ctr	Marshalltown	50-99	Retail Trade
Marshall County Sheriff Dept	Marshalltown	50-99	Public Administration
Marshalltown Mayor's Office	Marshalltown	50-99	Public Administration
Marshalltown Police Dept	Marshalltown	50-99	Public Administration
Neighborhood Crime Watch	Marshalltown	50-99	Public Administration
Applebee's	Marshalltown	50-99	Accommodations and Food service
Best Western-Regency Inn	Marshalltown	50-99	Accommodations and Food service
Legends American Grill Mc Donald's	Marshalltown Marshalltown	50-99 50-99	Accommodations and Food service Accommodations and Food service
Marshalltown Co	Marshalltown	50-99	Manufacturing
Mid Iowa Community Action	Marshalltown	50-99	Other services excluding public admin
Anson Elementary School	Marshalltown	50-99	Educational services
Fisher Elementary School	Marshalltown	50-99	Educational services
Franklin Elementary School	Marshalltown	50-99	Educational services
Hoglan Elementary School	Marshalltown	50-99	Educational services
Woodbury Elementary School	Marshalltown	50-99	Educational services
Iowa River Hospice	Marshalltown	50-99	Health care and social assistance
Kimball-Beecher Family Dntstry	Marshalltown	50-99	Health care and social assistance
Marshalltown YMCA	Marshalltown	50-99	Health care and social assistance
Southridge Nursing & Rehab	Marshalltown	50-99	Health care and social assistance
Mechdyne Corp	Marshalltown	50-99	Prof scientific technical
UPS Customer Ctr	Marshalltown	50-99	Prof scientific technical
Con-Struct Inc	Marshalltown	50-99	Construction
Gethmann Construction Inc	Marshalltown	50-99	Construction
Sutherland Co	Montezuma	50-99	Manufacturing
Montezuma Communiuty Sch	Montezuma	50-99	Educational services
School Montezuma Board Scr	Montezuma	50-99	Educational services
State Center Nursing & Rehab	State Center	50-99	Health care and social assistance
Sac & Fox Tribal Offices	Tama	50-99	Public Administration
Sac & Fox Tribe Planning	Tama	50-99	Public Administration
Meskwaki Settlement School	Tama	50-99	Educational services
South Tama County High Sch	Tama	50-99	Educational services
Courth Toma Florantes		E0.00	I Education of the section of the se
South Tama Elementary	Tama	50-99	Educational services
Sunny Hill Care Ctr	Tama	50-99	Health care and social assistance
Sunny Hill Care Ctr Fareway	Tama Toledo		
Sunny Hill Care Ctr Fareway Kimball-Beecher Family Dntstry	Tama Toledo Toledo	50-99 50-99 50-99	Health care and social assistance Retail Trade Health care and social assistance
Sunny Hill Care Ctr Fareway	Tama Toledo	50-99 50-99	Health care and social assistance Retail Trade

Source: <u>Iowa Workforce Development Employer Database</u> accessed in January of 2020. Data derived from National Infogroup database and available through Iowa Workforce Development. Based on 1274 identified employers in the region This is an estimate to be used for general economic development purposes only.

## **Appendix B – Commuting Data (On the Map)**

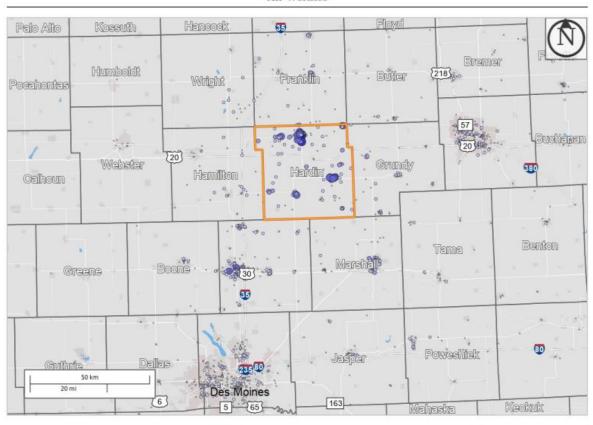
The data presented in this section is provided using the US Census Bureau On the Map tool. The represents a Distance/Direction Report for each county in the Region 6 area, as well as for the largest city in the region, Marshalltown. The tool starts with a selected area (in this case, a specific city or county). The place of primary employment for those workers living in the selection area is then mapped, providing insight into where workers travel for work and how far.

More information about how to access this data yourself and use the tool is available at <a href="https://lehd.ces.census.gov/doc/help/onthemap/OnTheMapSampleDDAnalysis.pdf">https://lehd.ces.census.gov/doc/help/onthemap/OnTheMapSampleDDAnalysis.pdf</a>.

## **Hardin County Distance/Direction Report – Home to Work**

Counts and Density of Work Locations for Primary Jobs in Home Selection Area in 2017

All Workers



## Map Legend

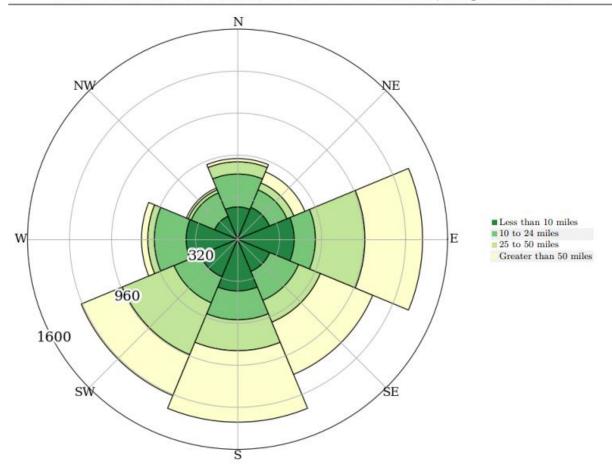
Job Density [Jobs/Sq. Mile]

- **5 48**
- **49 177**
- 178 392
- **393 693**
- 694 1,080

#### Job Count [Jobs/Census Block]

- . 1 2
- . 3 12
- 13 38
- 39 89
- 90 174
- Selection Areas
  Analysis Selection





Primary Jobs for All Workers in 2017

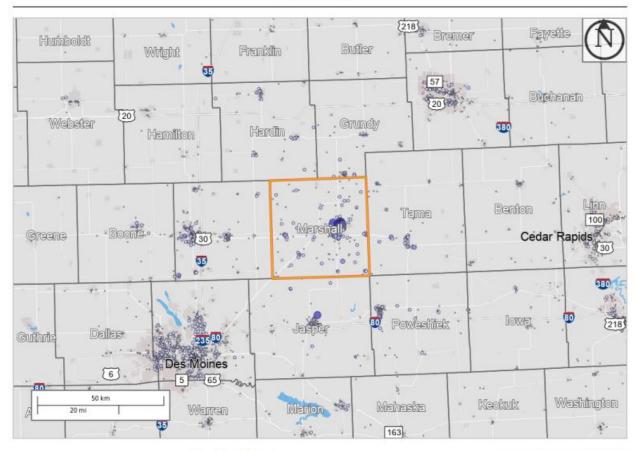
Distance from Home Census Block to Work Census Block, Living in Selection Area

	20	17
Distance	Count	Share
Total Primary Jobs	7,528	100.0
Less than 10 miles	2,490	33.1
10 to 24 miles	1,664	22.1
25 to 50 miles	1,445	19.2
Greater than 50 miles	1,929	25.6

## Marshall County Distance/Direction Report – Home to Work

Counts and Density of Work Locations for Primary Jobs in Home Selection Area in 2017

All Workers



## Map Legend

## Job Density [Jobs/Sq. Mile]

- 5 174
- 175 682 ■ 683 - 1,529
- **1,530 2,716**
- 2,717 4,241

## Job Count [Jobs/Census Block]

- . 1 3
- . 4 44
- 45 219
- 220 690
- 691 1,685

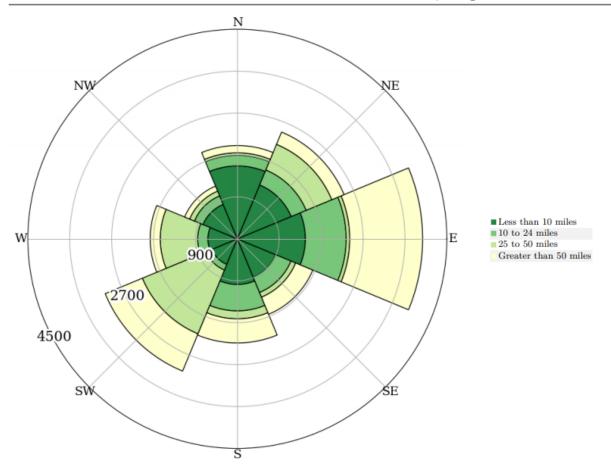
## Selection Areas

Manalysis Selection



## Primary Jobs for All Workers in 2017

Distance and Direction from Home Census Block to Work Census Block, Living in Selection Area

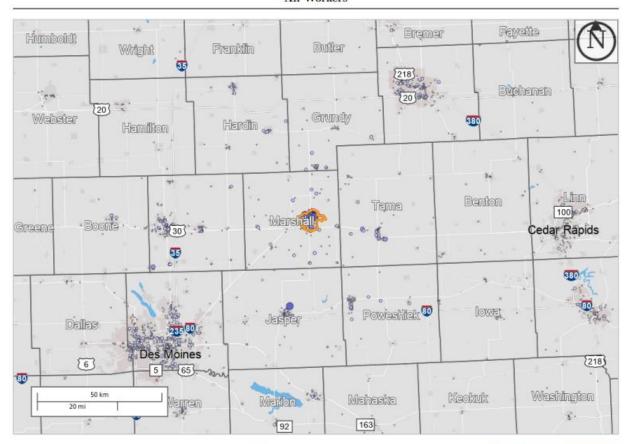


 ${\bf Primary\ Jobs\ for\ All\ Workers\ in\ 2017}$  Distance from Home Census Block to Work Census Block, Living in Selection Area

	2017			
Distance	Count	Share		
Total Primary Jobs	18,622	100.0		
Less than 10 miles	8,178	43.9		
10 to 24 miles	2,923	15.7		
25 to 50 miles	3,399	18.3		
Greater than 50 miles	4 122	22.1		

## Marshalltown Distance/Direction Report - Home to Work

Counts and Density of Work Locations for Primary Jobs in Home Selection Area in 2017  $\,$  All Workers



## Map Legend

#### Job Density [Jobs/Sq. Mile]

- · 5 160
- **161 628**
- **629 1,406**
- **1,407 2,497**
- **2,498 3,899**

#### Job Count [Jobs/Census Block]

- . 1 3
- . 4 41
- 42 205
- 206 647
- 648 1,579

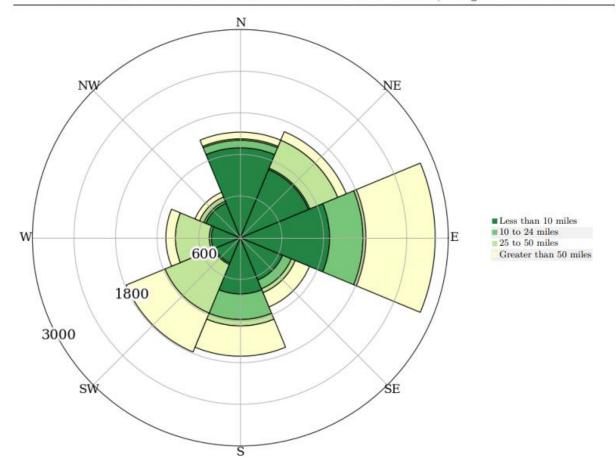
## Selection Areas

Manalysis Selection



Primary Jobs for All Workers in 2017

Distance and Direction from Home Census Block to Work Census Block, Living in Selection Area



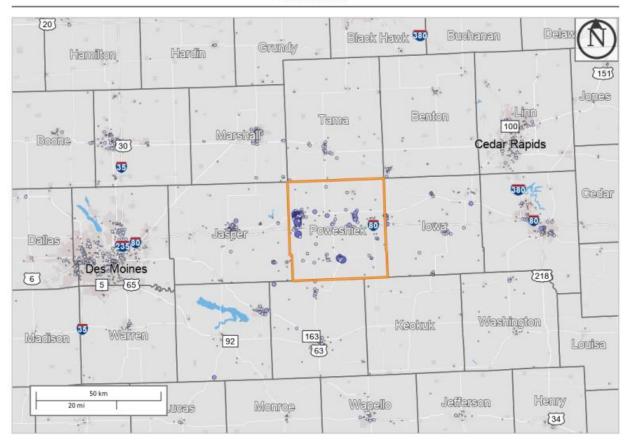
Primary Jobs for All Workers in 2017

Distance from Home Census Block to Work Census Block, Living in Selection Area

	2017		
Distance	Count	Share	
Total Primary Jobs	12,335	100.0	
Less than 10 miles	6,470	52.5	
10 to 24 miles	1,199	9.7	
25 to 50 miles	1,964	15.9	
Greater than 50 miles	2,702	21.9	

## **Poweshiek County Distance/Direction Report – Home to Work**

Counts and Density of Work Locations for Primary Jobs in Home Selection Area in 2017  $_{
m All\ Workers}$ 



## Map Legend

Job Density [Jobs/Sq. Mile]

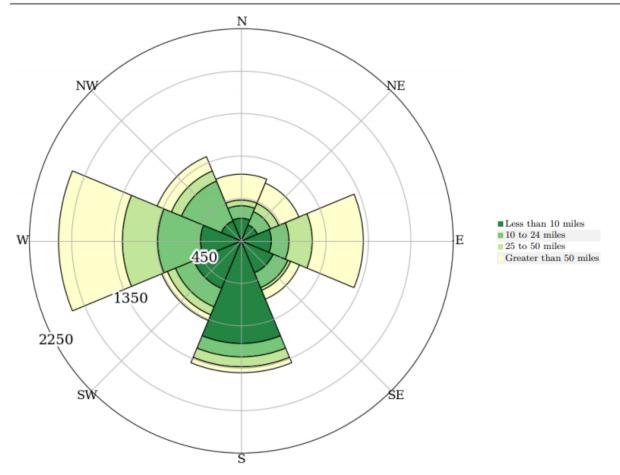
- 5 109
- 110 424425 949
- 425 949 ■ 950 - 1,684
- **1**,685 2,629

Job Count [Jobs/Census Block]

- . 1 2
- . 3 20
- 21 98
- 99 308
- 309 751

Selection Areas



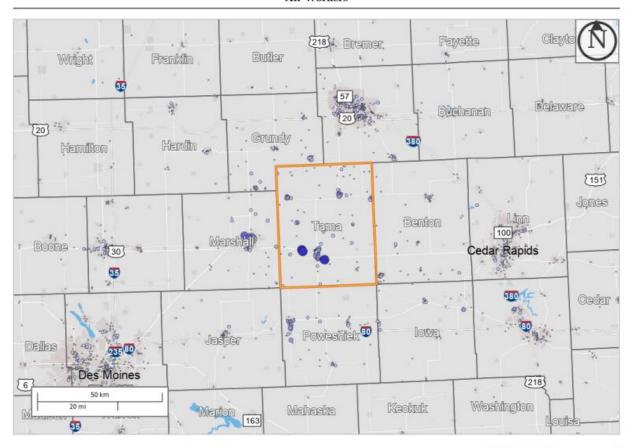


 ${\bf Primary\ Jobs\ for\ All\ Workers\ in\ 2017}$  Distance from Home Census Block to Work Census Block, Living in Selection Area

	2017		
Distance	Count	Share	
Total Primary Jobs	8,550	100.0	
Less than 10 miles	3,409	39.9	
10 to 24 miles	1,903	22.3	
25 to 50 miles	1,122	13.1	
Greater than 50 miles	2.116	24.7	

## Tama County Distance/Direction Report - Home to Work

Counts and Density of Work Locations for Primary Jobs in Home Selection Area in 2017  $_{
m All\ Workers}$ 



## Map Legend

Job Density [Jobs/Sq. Mile]

- **5** 48
- **49 179**
- **180 397**
- 398 702703 1,095

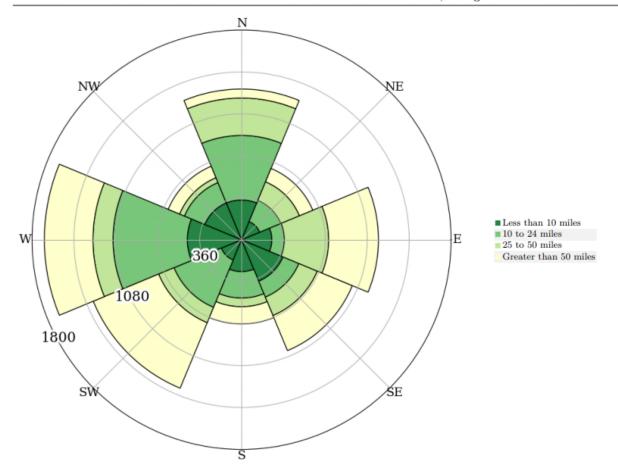
Job Count [Jobs/Census Block]

- . 1 4
- . 5 26
- 27 88
- 89 208
- 209 407

Selection Areas

M Analysis Selection





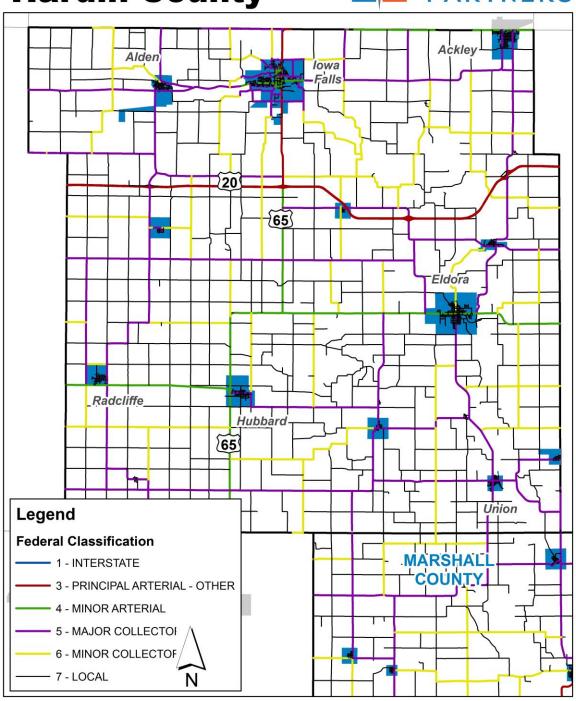
 $Primary\ Jobs\ for\ All\ Workers\ in\ 2017$  Distance from Home Census Block to Work Census Block, Living in Selection Area

	2017		
Distance	Count	Share	
Total Primary Jobs	8,639	100.0	
Less than 10 miles	2,426	28.1	
10 to 24 miles	2,497	28.9	
25 to 50 miles	1,481	17.1	
Greater than 50 miles	2,235	25.9	

## Appendix C – FFC Maps of Region

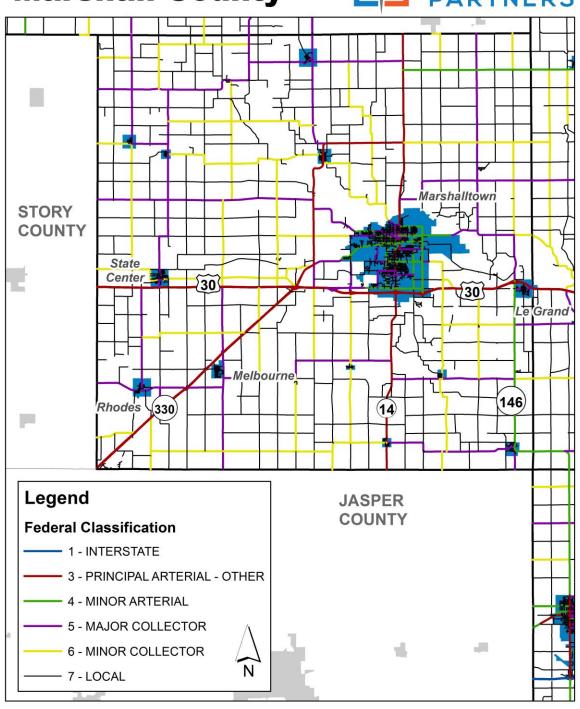
# FFC Roads - Hardin County



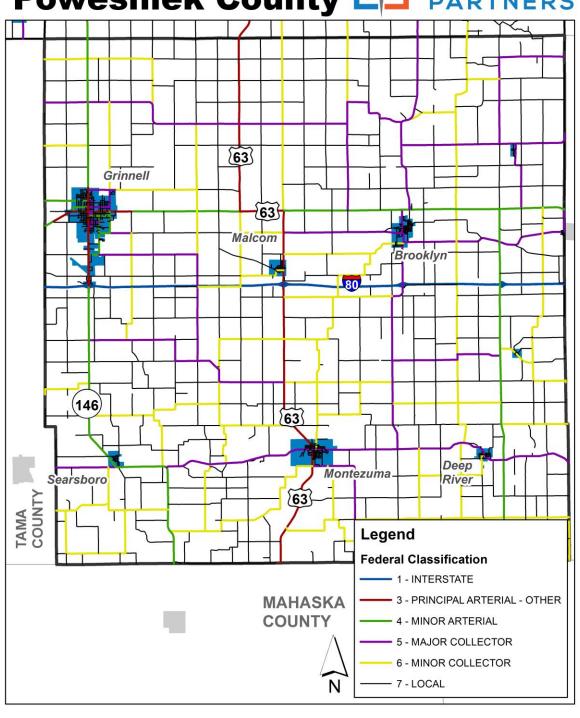


# FFC Roads - Marshall County



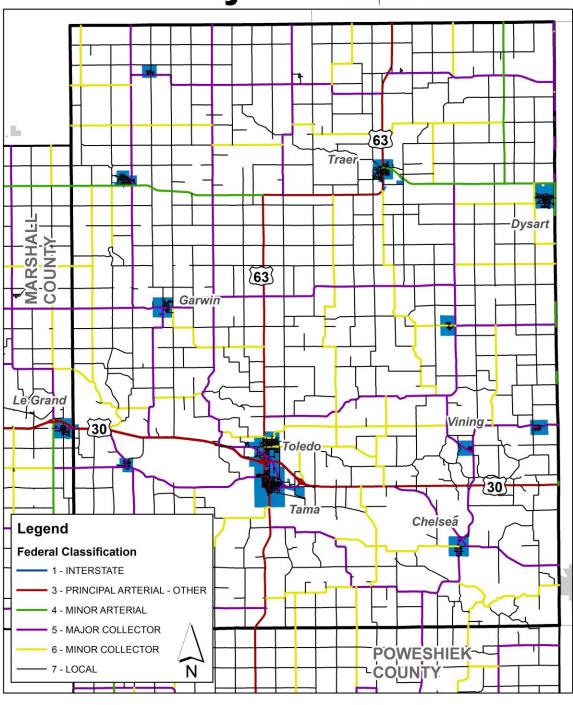


# FFC Roads Poweshiek County RESO PARTI



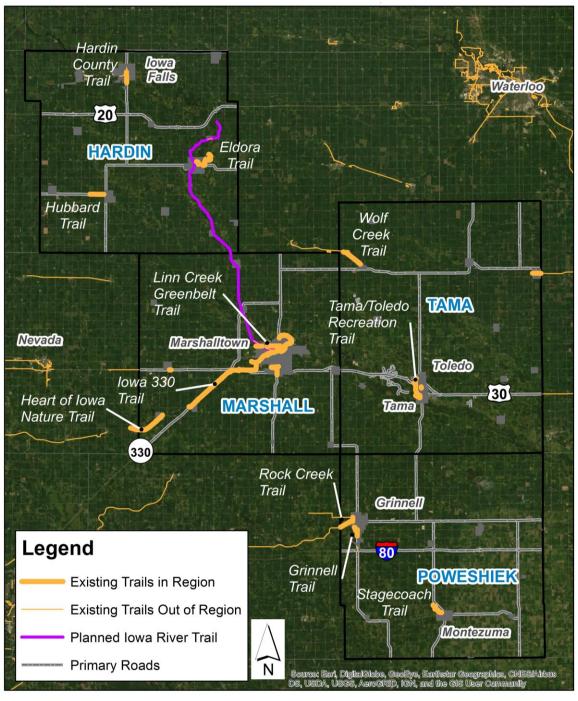
# FFC Roads - Tama County

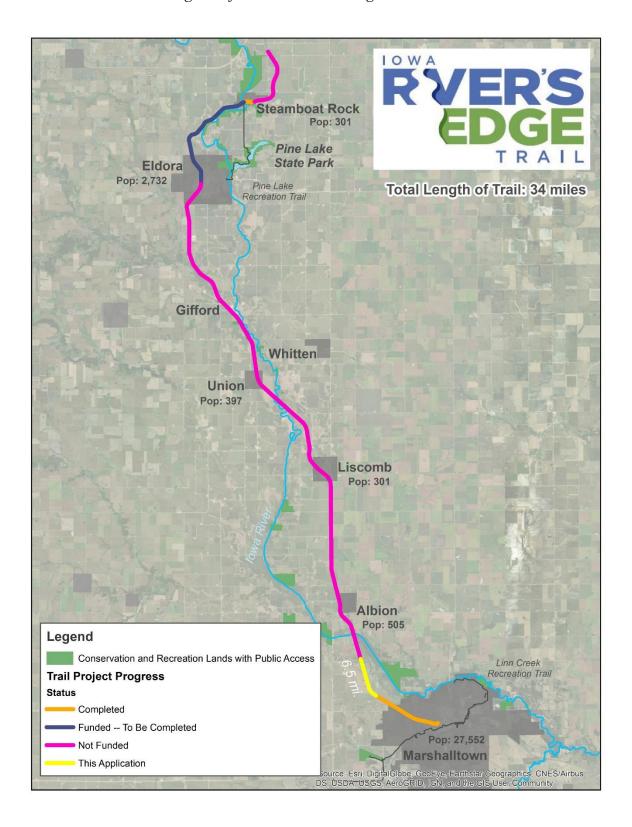


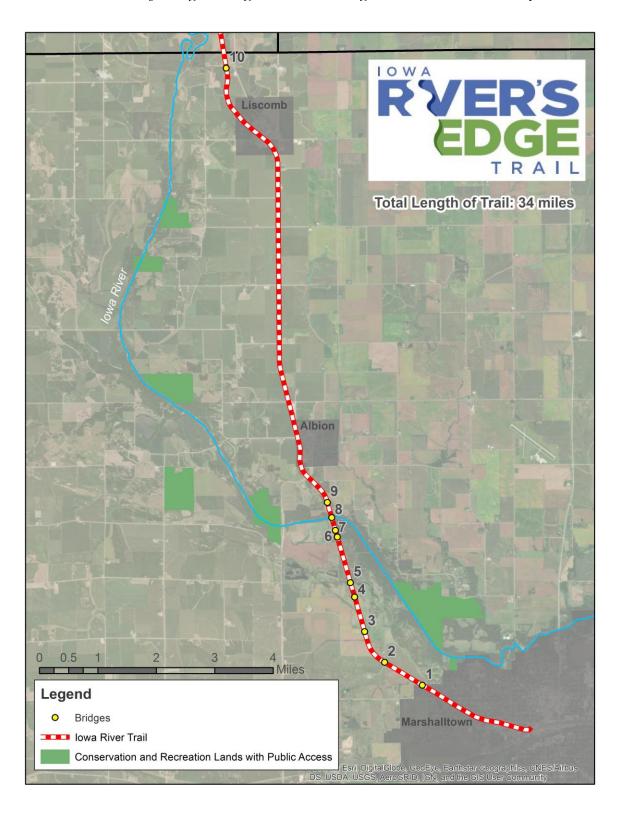


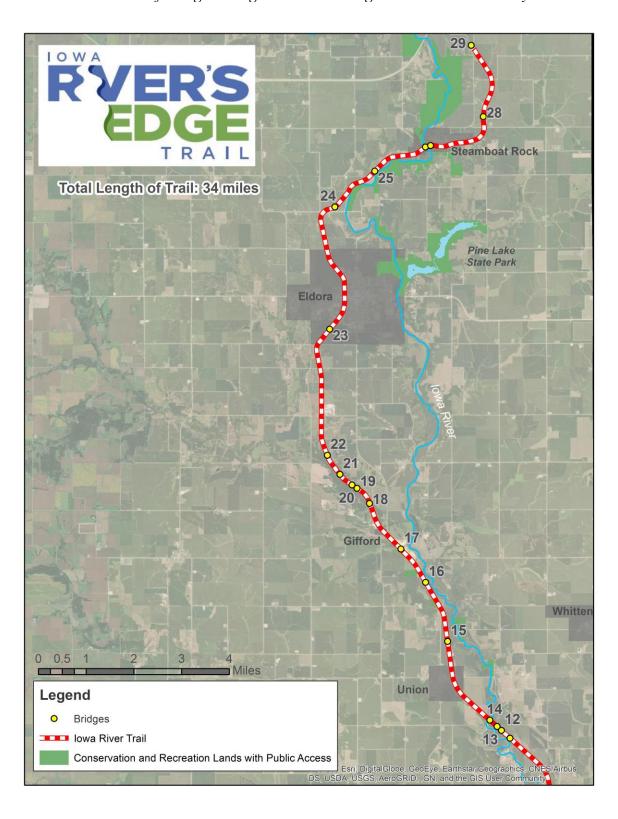
## Appendix D – Trails in the Region

Trails Located in RPA 6 Area









## **Appendix E – Public Participation Survey**

## Transportation Needs & Priorities Survey

Region 6 Resource Partners is gathering input for the Iowa Department of Transportation (IDOT) and local decision makers on regional transportation needs and priorities. The information contained in this survey can help influence how federal transportation funds are used. The responses to this survey also can be used to help guide how the IDOT invests state resources within the region.

Region 6 Resource Partners desires to obtain input from all who live, work and play in the region. We hope that you will spend 5 minutes to complete this important transportation survey. There will be no link between your survey responses and your identity.

1.	Which county do you primarily live and/or work?
	Mark only one oval.
	Hardin
	Marshall
	Poweshiek
	Tama
	None of those counties
2.	If you live in the Hardin, Marshall, Poweshiek, or Tama County region, how long have you lived there?
	Mark only one oval.
	Less than 1 year
	1-5 years
	6-9 years
	10-19 years
	20 or more years
	I do not live in the area

3.	Which best describes where you live?
	Mark only one oval.
	In a town or city, including unincorporated areas adjacent to a town or city  In the country or a rural, unincorporated area
4.	What is the zip code of your home address?
5.	How far do you travel to get to your place of employment (one-way)?  Mark only one oval.
	Less than 1 mile  1-2 miles  3-10 miles  11-20 miles  21-35 miles  36-50 miles  Greater than 50 miles  N/A

Mark only one oval	Primary method of transportation	Secondary method of transportation	Occasional use	Never or infrequently use
Car/SUV/Truck - drive alone				
Car/SUV/Truck - carpool		0		
Walking				
Biking with street traffic				
Biking on recreational trails			0	
Public Transit				
Taxi or ride share service				
	current method of to	thod of transportatior ransportation?	n to reach yo	ur destinat

Unsure or Don't Know

6. How often do you use the following methods of transportation to get from your

for shared rides to major employer

Region 6 should develop programs for safe walking or biking to

locations.

school.

10.	EXISTING PUBLIC TRANSIT OR TAXI - For the following transportation options, please mark whether the option meets the local need, does not meet local need of is not needed in your community. Consider how households without access to a personal vehicle may access grocery, shopping, medical, work, and leisure destinations.						
	Mark only one oval per row.						
		Loc need		ocal need not met	Service r		sure or 't know
	IN TOWN: A fixed route bus service provided daily for in town trips		)				
	OUT OF TOWN: Bus or othe service for destinations out town to larger metro areas	_					
	IN TOWN OR OUT OF TOWN Peoplerides Public Transit - scheduled 24 hr ahead, serv days and hours vary.		)				
	IN TOWN OR OUT OF TOWN Taxi service, ride sharing (Uber, Lyft) or other on- demand service	l:			0		0
11.	EXISTING ROADS AND BI whether you strongly agr			_			
	mark only one oral per low.	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Unsure or don't know
	Existing bridges (state, county, and city) are adequately maintained.					0	
	Existing state roads are adequately maintained.						
	Existing county roads are adequately maintained.						
	Existing city local roads are adequately maintained.						

 Keeping in mind transportation funds are limited, please mark whether you feel each transportation option is very important, important, neutral, somewhat important, or not important.

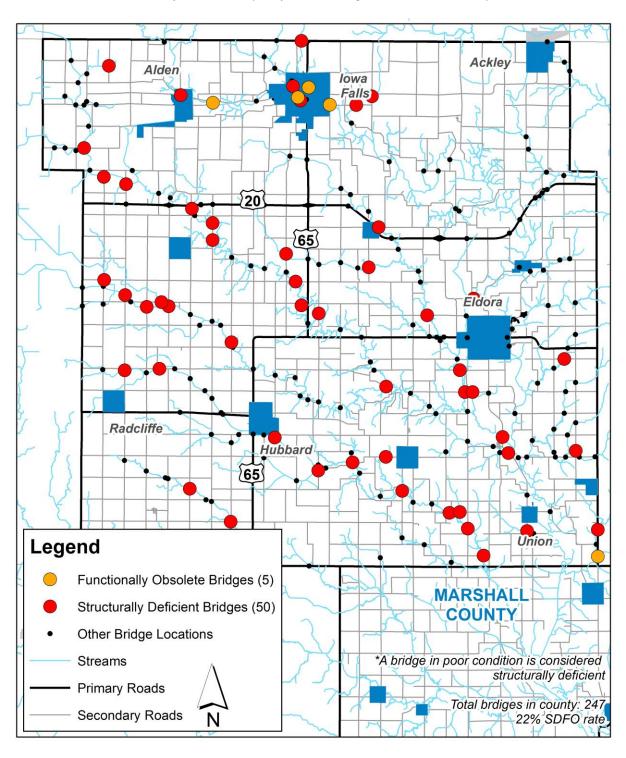
Mark only one oval per row.

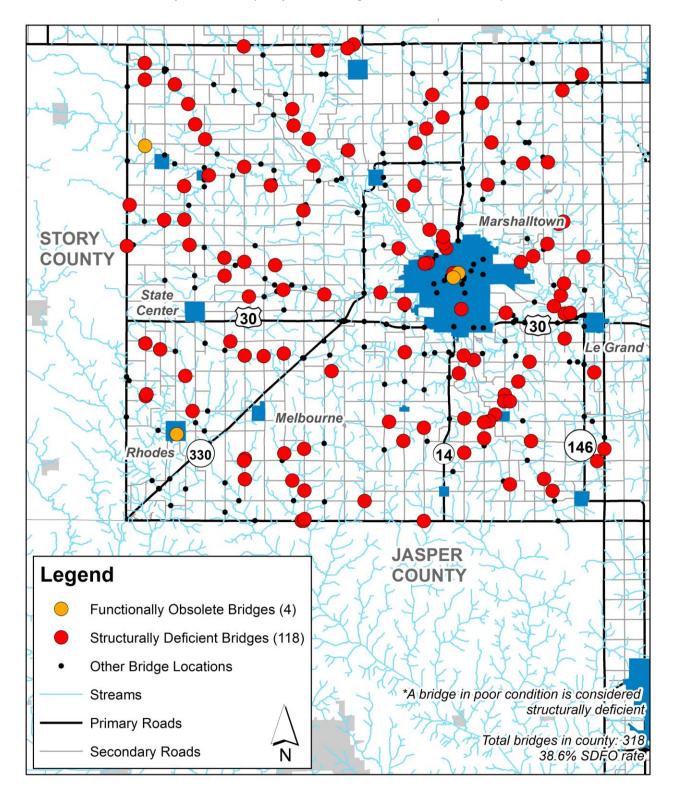
	Very important	Important	Neutral	Somewhat important	Not important	Unsure or don't know
Maintain and improve existing road system and bridges				0		$\bigcirc$
Maintain and improve sidewalks						
Improve road safety						
Build bike lanes along roads						
Build multi-use recreation trails						
Fund safe routes to school projects - walkability						
Expand public transit service						
Offer more transit services for elderly and disabled	0		0		0	
Create carpool/vanpool programs						
Maintain and improve airports						
Maintain and improve railway						

13.	What is your age?
	Mark only one oval.
	16-19
	20-24
	25-44
	45-54
	55-59
	Option 7
	60 years and over
14.	What sector best describes your interest/involvement in transportation in the
14.	region?
	Check all that apply.
	Resident
	Commuter
	Business Owner
	Agriculture Industry
	Health Care/Social Services Industry
	Sales/Retail/Service Industry
	Manufacturing  Operators (Building Industry)
	Construction/Building Industry
	Transportation Industry Insurance/Real Estate
	Education
	Non-Profit
	Professional
	Local Government Employee
	Other Government Employee
	Student
	Retired/Not Employed
	Other:

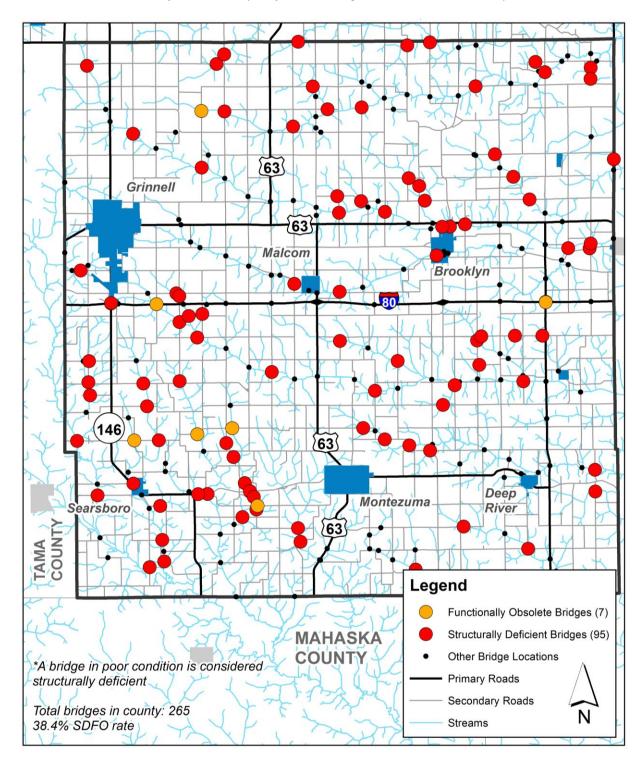
## Appendix F - Bridge Condition in Region

Location of Structurally Deficient Bridges in Hardin County





## Location of Structurally Deficient Bridges in Poweshiek County



Location of Structurally Deficient Bridges in Tama County

